

LAYSAN

LS 19

JUNE 1967

DELONG

Leewards #19

Laysan Island.

7-13 June 1967

R.L. DeLong

Laysan Island

7- June 1967

Dore
Curt

Basin Survey 79me

Laysan A/batris

Chicks

Ad.

12, 3, 3, 10, 20, 20, 11

50, 100, 30, 200, 200

200, 100 25, 20, 20

1/23

Black footed Albatross

Chicks

5, 2, 50, 75, 256
130, 1260, 287, 100, 204
135, 140, 290, 450
430, 100, 300, 300, 200
200, 300 350 350, 100
279, 250, 387, 500, 550
302, 104, 50, 20

7611

Wedge tails

Christmas Island Shear.

Nesting in Rocks on North end of is.
See diggers burrows in the sand
under the rocks. See on recently
incubated eggs. - associated
with bulwer petrels.

Rocks on So end of Is. - 50 eggs
Ca ~~100~~ 200

Bonin Island Petrel

Balders Petrel

North Rocky & Sand beach - between
on mud & heavily incubated eggs.

Nest sites: burrows under rocks. Only
deep enough to obtain complete shade.

Nesting associated with CFSher in
same habitat.

#'s with hundreds - ca 100-200 at
this location.

Brown booby

W/ie

7

7

W/ie

111

13

W/ie & 1NG

1

1

Red-footed booby

w/ie

||||

[6]

w/sdy

||||

[4]

w/Ldy

Nest unknown

[11]

w/ny

||||

[5]

w/m dy

||||

[5]

Blue faced booby

w/ie

v4/e

w/ny

1

[1]

v/sdy

11

[12]

v/m dy

11

[12]

w/Ldy

Great frigate

w/e

||||| ||||| ||||| |||||
||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

North entry

||

72

~~|||||~~

perched |||

w/dy

||||| ||||| ||||| |||||
||||| ||||| ||||| ||||| |||||

|||||

49

w/sdy

||||| ||||| |||||
||||| |||||

23

w/maw

||||| ||||| |||||
||||| ||||| |||||

31

Ldy

||||| |||||

8

Inn - Sal

||||| ||||| |||||

|||||

29

North end

|||||

6

R & T B

✓ADP

w/e

||||| ||||| ||||| ||||| ||||| |||||

32

w/sdy - |||||

5

635-10780 Aw/sdy ✓

two markers - Scurry - on edge of fig etc
along a meter of ground

Gray backed tern

Eggs

1111

Wdg 1111

Ldg 111

Flying 1111

111

13 - on beach high and in Rocks

100 on beach & Seaweed fringe

200 on old beach - flying & large colony

Sooty tern

Black Noddy

Brown Noddy

w/ie

|||| |||| ||||

v/sdy

wady

1

on north beach in boulder - all on eggs -

Fairy tern

w/ndy - 1 in S. woods - back above ground
w/ndy - on rock on beach.

w/ie III Sdy - 1 birds
above ground

w/ndy III

Flying in

II

Shore birds

Ruddy Turnstone

14/30, 6

[39]

Golden Plover II [2]

breeding:

non breeding

Wandering Tattler I

[11]

BTcl.

14/11

[5]

Adults

Cow w/ pups

|||||

Paired

|||||

Subadults

|||||

128 136

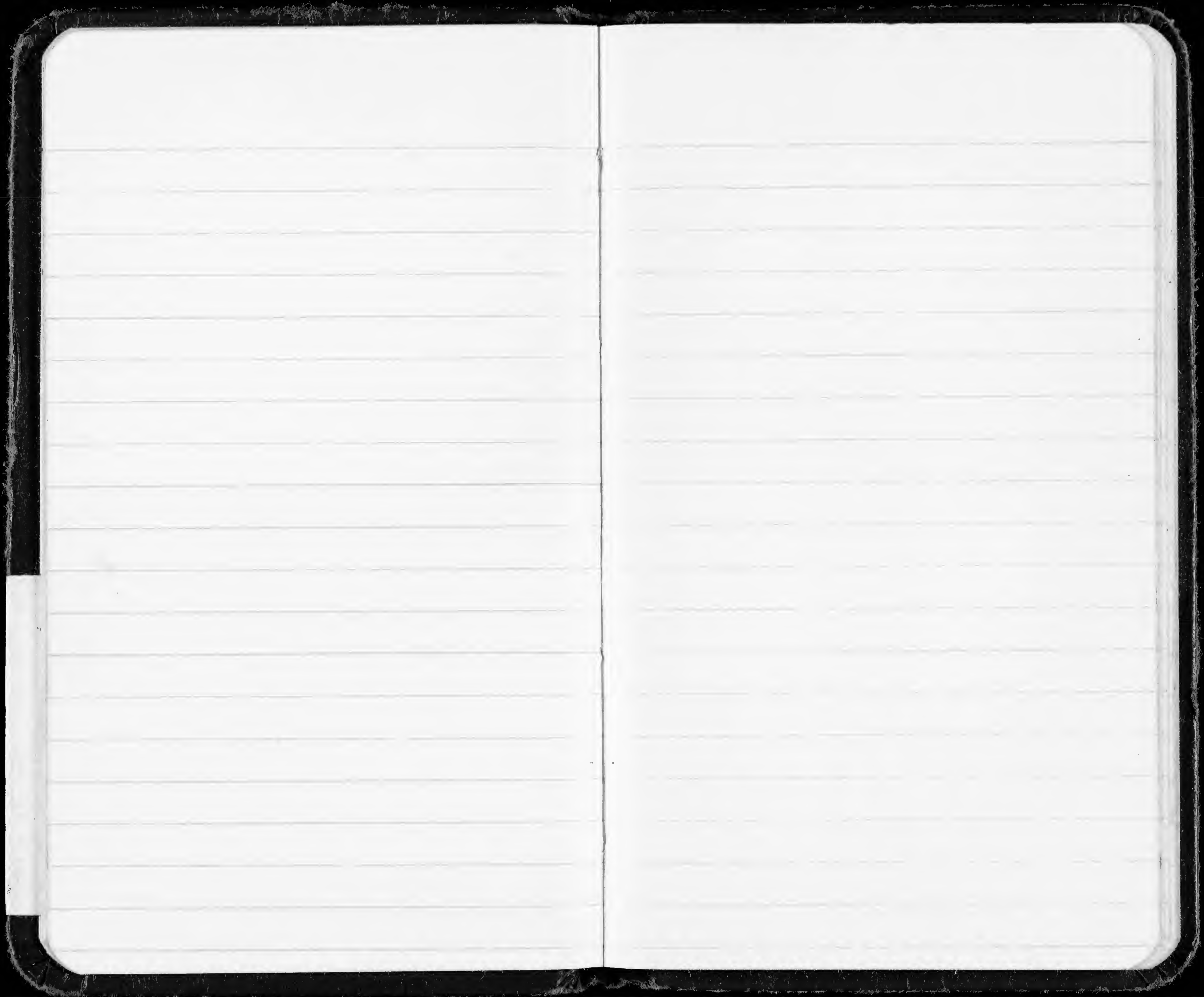
Yearlings

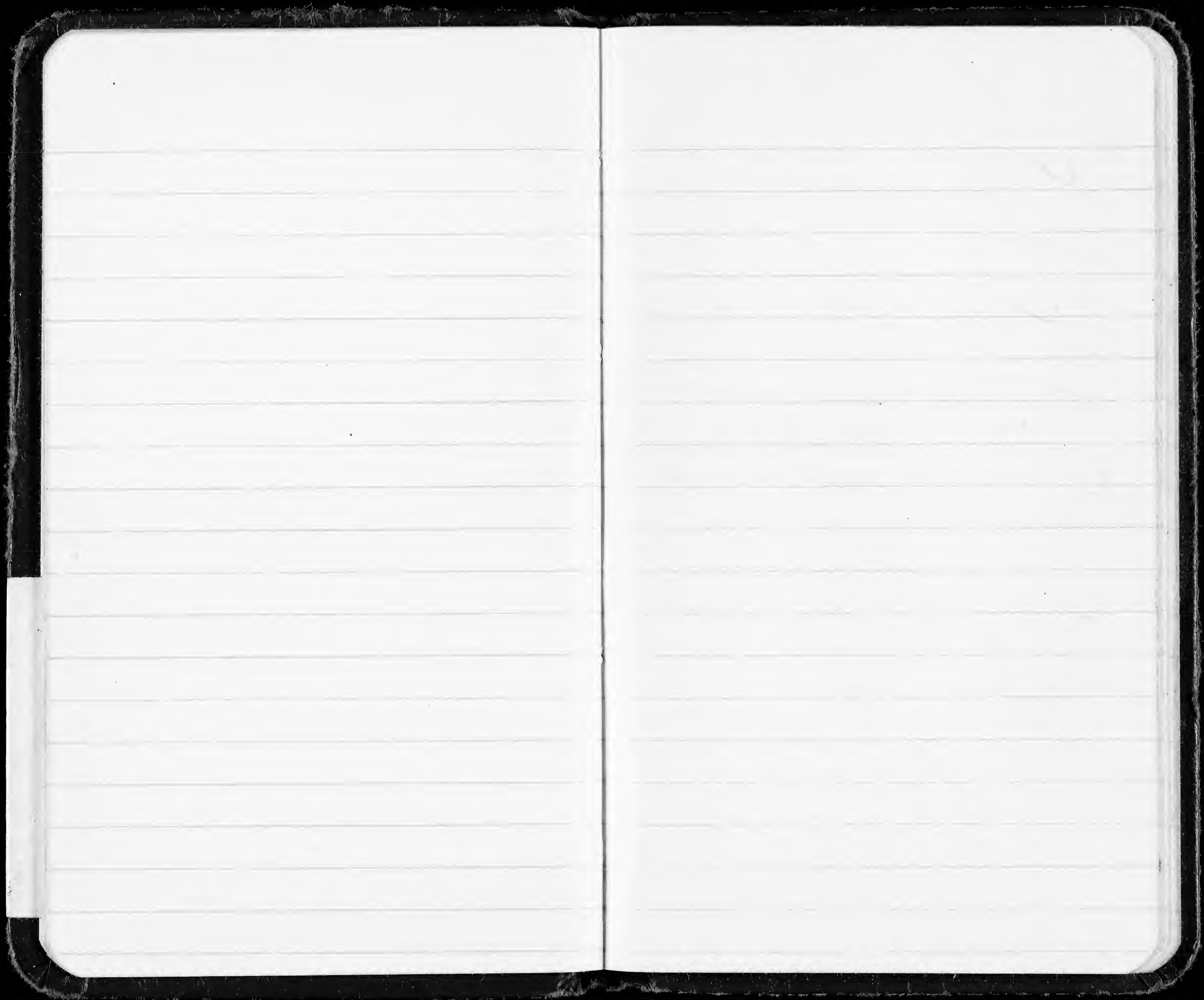
|||||

pups (unweaned)

|||||







Bands issued 7 June

✓ 993 - 45001 - 45000
45501 - 50000 ? *Reddish*

✓ 705 - 14501 - 600

✓ 993 - 45001 - 50000
pink on ~~clad~~ *dup clad, blue, blue BP*

✓ 705 - 14501 - 600 - wtsk
all light plum.

705 - 745 - -

635 - 19217 - *add* - 45 Lt
625 - 32658 - " 39 ✓
635 - 19455 - " 37 ✓
19692 - " 46

✓ADP

963

(19)

85097 ✓	863L	753-74254
61764 ✓	73987	893-01682-21
24037 ✓	64068	823-13990
80612 ✓	72148 w/ol	823-19043
81329 ✓	68801	
47502 ✓	77405	
67239 ✓		
85639 ✓		
66468 ✓		
45999 ✓		
79909 ✓		
65572 ✓		
74794 ✓		
71588 ✓		
98068 ✓		
50075 ✓		
60195 ✓		
68899 ✓		
67356 ✓		

✓ADP

903

(17)

41368 ✓	
49104 ✓	
49485 ✓	
75088 ✓	
50835 ✓	
89231 ✓	
29426 ✓	
34205 ✓	
33259 ✓	
50984 ✓	
32545 ✓	
67280 ✓	
56897 ✓	
71119 ✓	
61570 ✓	
61564 ✓	
31267 ✓	

120

0.5

0.1

Sad 1

41

Pass

Prin

Com in / p. 10

A unknown
11

757-

8 Jan

34 301-400

34 401-500

33 501-600

✓ BFA - all this data
checked!

99
✓ADP

103

65113 ✓

71090 ✓

60076 ✓

72133 ✓

843-67326 ✓

1 68747 ✓

13927 ✓

823-17826 ✓

897-04964 ✓

10744 ✓

07931 ✓

903

✓ADP
(21)

85245 ✓

65300 ✓

50786 ✓

25999 ✓

88790 ✓

48571 ✓

50650 ✓

47994 ✓

56490 ✓

38305 ✓

30870 ✓

30065 ✓

76476 ✓

81775 ✓

38525 ✓

50969 ✓

85972 ✓

84189 ✓

25978 ✓

40611 ✓

74366 ✓

109 June

✓ ADP

843

(a)

893

(8)

68805 ✓ 65606 ✓

67189 ✓

62146 ✓

67985 ✓

67897 ✓

64411 ✓

65881 ✓

67263 ✓

10771 ✓

05850 ✓

02791 ✓

00485 ✓

07731 ✓

05932 ✓

10364 ✓

05606 ✓

793 - 82235 ✓

893 - 07571 ✓

06378 ✓

to 3

12365 ✓

863 ✓

64203 ✓

66843 ✓

66413 ✓

74310 ✓

68813 ✓

60301 ✓

26728 dc Requit ✓

64825 ✓

67106 ✓

(a)

(A)

ALL on ADP ✓

903

(49)

59544 ✓

32169 ✓

61934 ✓

45792 ✓

73730 ✓

65219 ✓

55314 ✓

90422 ✓

37917 ✓

42521 ✓

88398 ✓

87133 ✓

51261 ✓

65330 ✓

63991 ✓

48623 ✓

24795 ✓

37065 ✓

54274 ✓

88168 ✓

69819 ✓

72953 ✓

71352 ✓

44472 ✓

27921 ✓

21879 ✓

65639 ✓

39639 ✓

33825 ✓

63878 ✓

99222 ✓

75660 ✓

68027 ✓

54636 ✓

60532 ✓

41839 ✓

43319 ✓

21346 ✓

55709 ✓

76777 ✓

22029 ✓

55728 ✓

35876 ✓

31128 ✓

53988 ✓

65173 ✓

70348 ✓

85368 ✓

37988 ✓

Some
lined

10 June

- 114 ♂ pup. unattended
 115 ♀ "
 116 ♂ "
 117 ♂ " Very fat & molting
 118 ♂ " Moderate size
 119 ♂ " "
 120 ♂ " Small - not very plump
 121 ♂ " Large - very fat - molting
 122 ♂ " young - on 1 week
 123 ♂ " Moderate size on 2-2.5 weeks
 124 ♂ " Small but not thin - ♀
 is small also
 125 ♂ " Silvery Pass.

A 37 - yr male ✓

Pup - New born - on beach by
 cave - umbilicus still
 web - not connected to
 placenta - Case very protuberant

11 June

Adult ♂

11 ✓

♀

||||| ✓

Seed ♂

1 ✓

♀

||||| ✓

u 1

yearling ♂

|||||

Yabotus

✓

♀

✓

u 11

✓

Parps ♂ flashes

10

✓

♀

1 ✓

Ad. paired

||||| |||||

✓

Parp - Silver ♂

||||| ~~|||||~~ |||||

✓

He 1

✓

con w/ps Blh

P.S. ♀

|||||

✓

Cu/p sIV

1

✓

AN

|||||

- ✓ A 39 ♀ yearling? (Brownish / Silver)
 ✓ A 48 ♂ yearling or older = Brownish
 algal growth
 ✓ A 59 ♀ - Photo - Pres
 ✓ A 43 ? " Pres
 ✓ A 63 ♀ Photo Pres
 ✓ A 61 ♂ Pres
 ✓ A 46 ♂ Pres

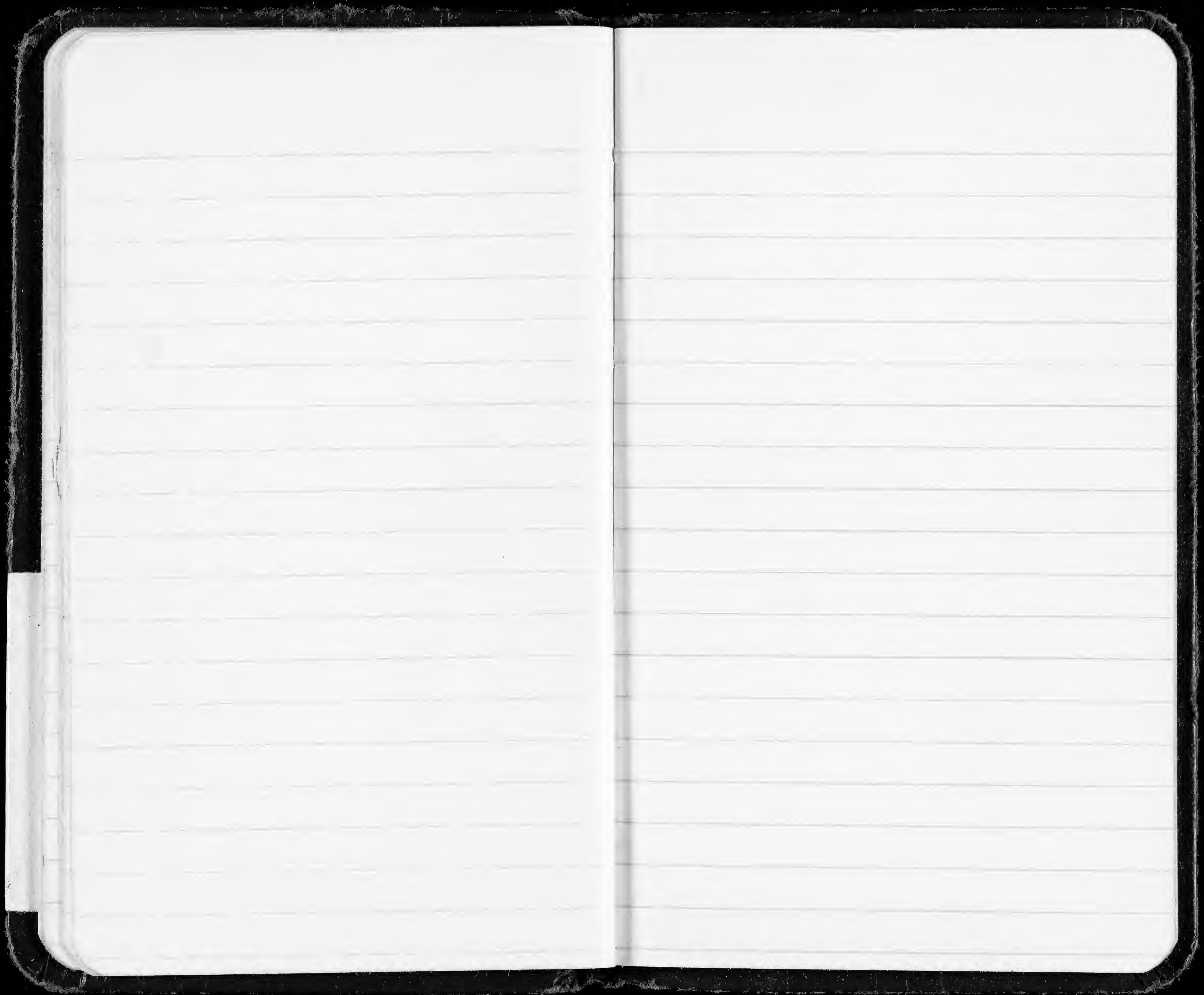
Tagged Pres a - 1

Turtle

Three together - net size

1 large animal

A 125 - 11 June - Pres ♂ in silver
pelage.



11 June Sooty Returns ² A _{3/4}
 903 ON ✓ ADP - All Brown (6)

67214	71176	39411	80167
33793	31378	85397	48657
32240	88351	39350	8717
89900	41798	39170	
50271	34038	57337	
33465	21579	81503	
61579	56046	42407	
41238	85785	48680	
68850	67578	20671	
40302	37080	48109	
46928	26679	56254	
47385	30764	84458	
45737	26679	88625	
57296	83859	43818	
88696	67709	41034	
51806	47937	73061	
40503	77436	54912	
26477	32275	54017	
39254	27945	89579	

✓ ADP ^{bd same trip} PBC 10
 823 | 993
 20753 | 47906

61525	73149
71110	77307
63820	68587
	62037
	63307
	60896
	61407

843 (14)

68149	61719
67282	69040
67720	63624
68979	65674
68744	
64408	
60434	
62849	
67882	
67892	

893

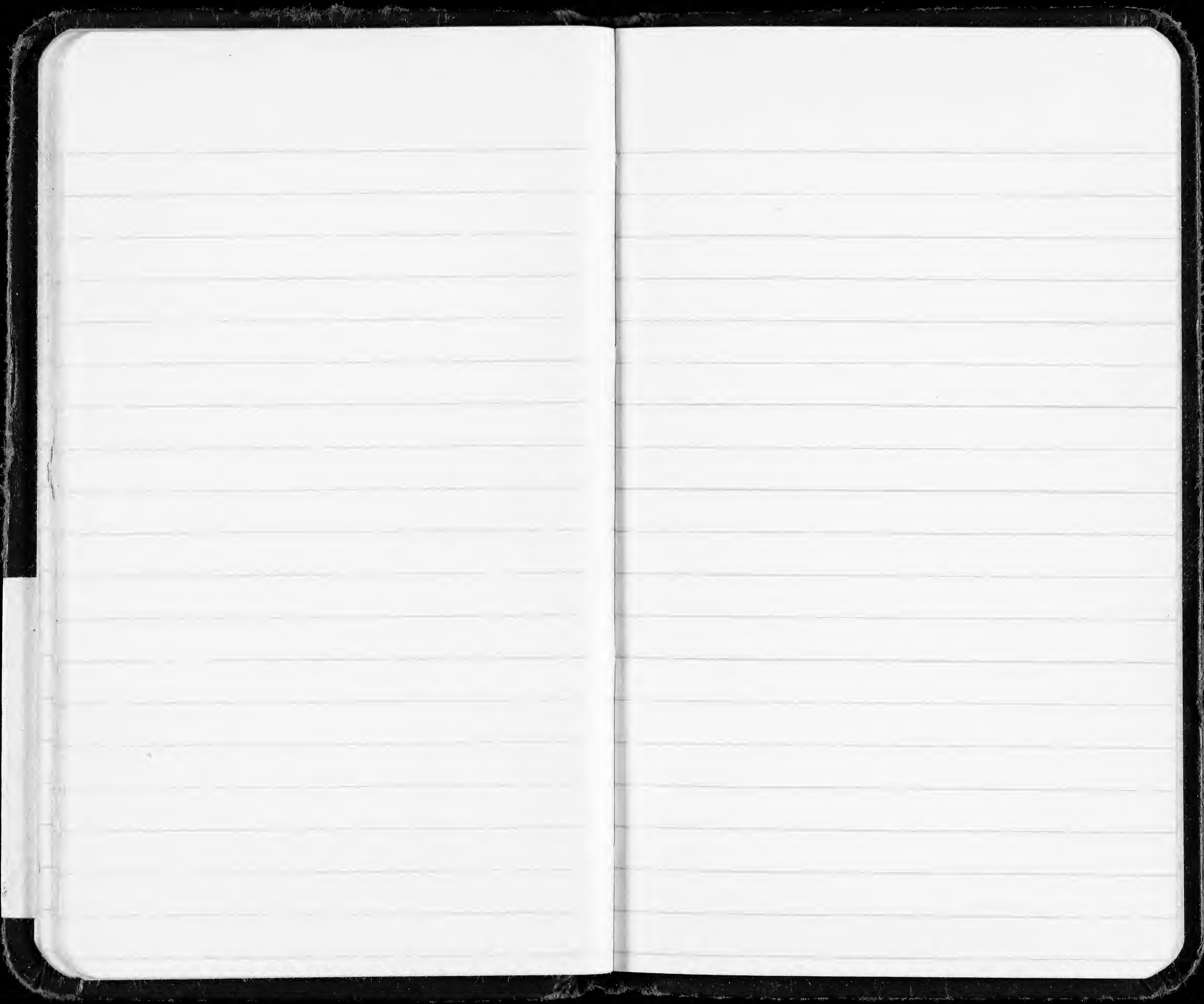
01965	10468
02496	07992
02015	07669
14093	05014
07443	13135
10179	07675
00794	08144
03355	04975
03141	
01923	

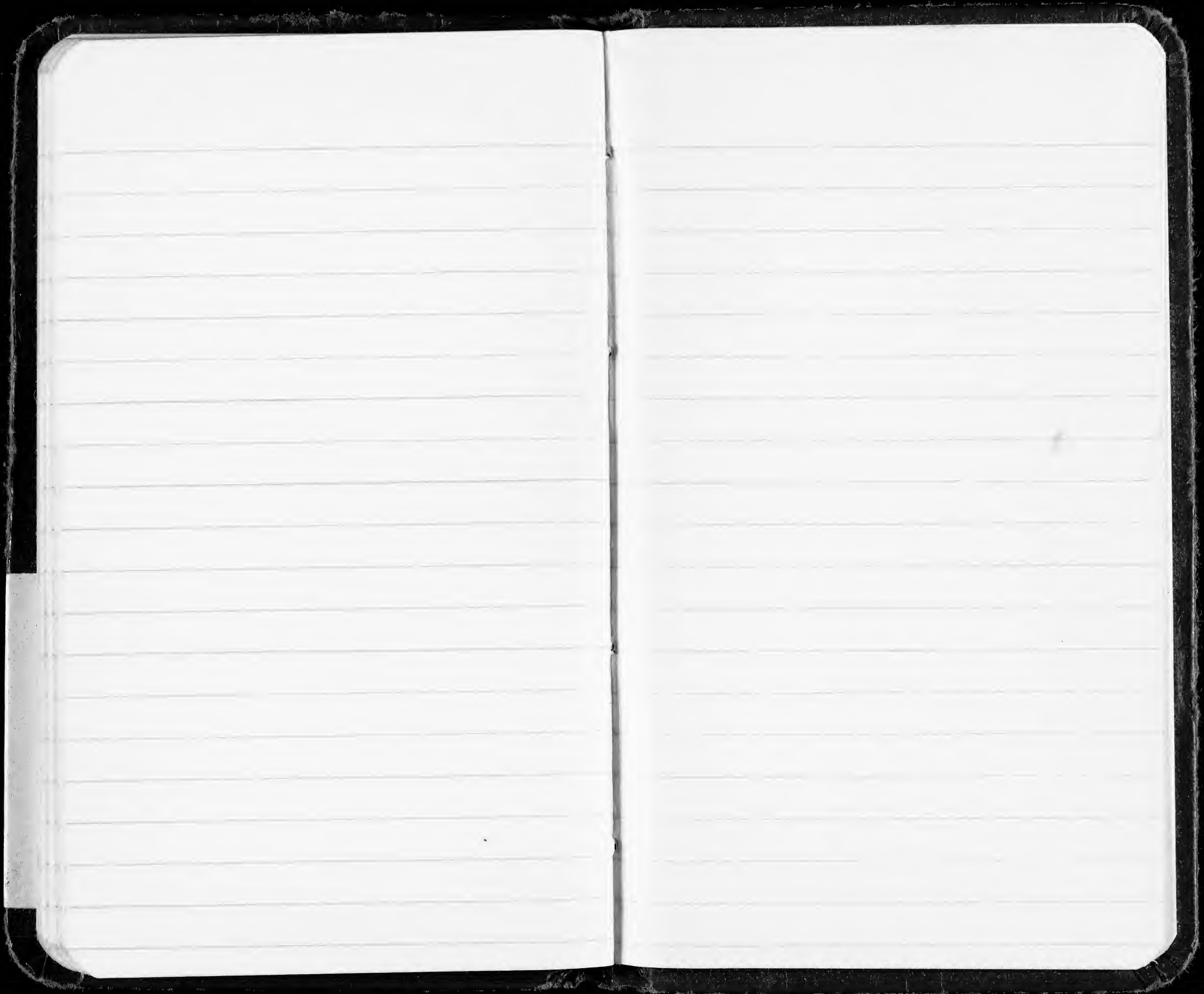
✓ADP
11 June

✓757- 25519 BFB ♀ AI
Roosting

441
773-40~~44~~ BI Pet Ad/Hy
band badly but nearly same. same

Aug 26
1964
March.







757-29001-16

RF or BFB

7530-222-00
FEDERAL SUPPLY SERVICE

Memoranda

Leeward Is #19

Mayson Island.

7-13 June 1967

Robert Ferguson

757-29001-16 RFB2
check

757-30201-16 - RFB bleed
used on Lisianski
rest of string not used

Done
CPH

2
2
0

10

Bands closed

7 June - nocturnal

993 - 44001 - 41,000 ^{total} (1000)

44001 - 45000 210.

all used on ~~all~~ adult
birds.

✓

Bands closed

7 June - nocturnal

705-14701-14800- TOTAL
100

all used on lt ph

✓ birds

Bands issued 8 June
dividual

757 - 34901 - 35000	} Total 300
34600 - 34700	
✓ 34800 - 34900	

all bands used on Laysan
albatross chicks

New Bands.
8 June - WTS

705 - 14201-300 (100)

all on WTS - light phase

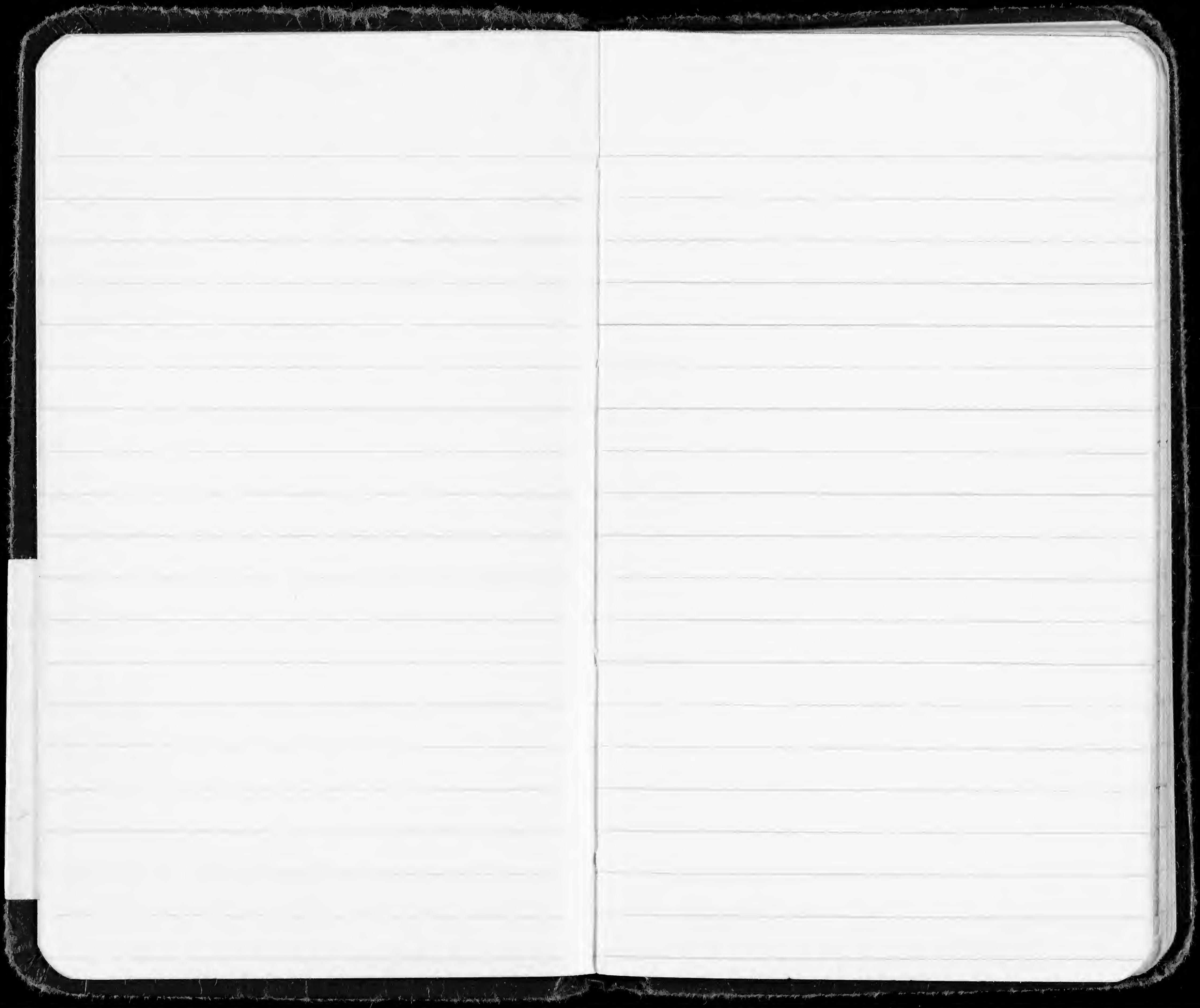
also

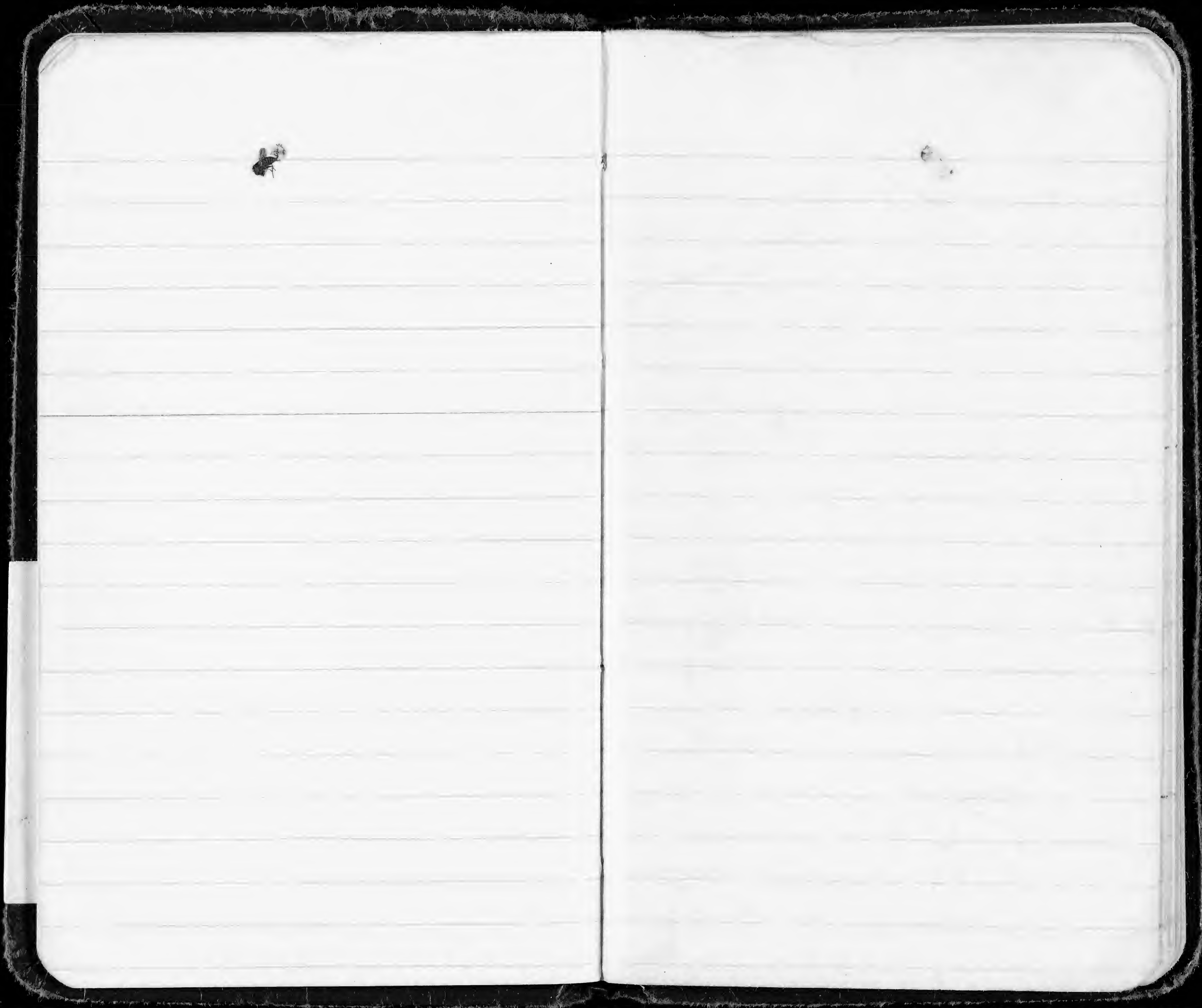
check Sera section
for BFB & G.F.
bandings.

Bands closed
10 June - NOCTURNAL

Sooty Tern adults

✓





7 JUNE ISLAND

SURVEY

LAYSAN

1250
100

LAYSAN CH.

AD

50 + 50 + 50 + 50

|||||

50 + 50 + 50 + 50

|||||

50 + 50 + 50 + 50

|||||

50 + 50 + 50 + 50

|||||

50 + 50 + 50 + 50

+20+20

50 + 3887. + 50 + 60 + 50 + 50 + 50 + 50

50 + 2000 + 50

(1400 + 2000 + 3900) (7,300)

BFA ch.

|||||

|||||

|||||

(35)

FI

|||||

(10)

(1 chick) med-chick

FINCH

|||||

|||||

|||||

|||||

RFB

Smch - 2

(2)

AD - 5 + 20

(25)

BIP 14 dead

|||||

(8)

Teal

|||||

|||||

|||||

|||||

+12 + 11

(52)

BFB

1e - |||||

(20)

Smch - |||||

|||||

(38)

2e - |||||

(6)

(1) 2 chicks

CNT

1e - 25 + 50 = 75

HNT - Noort.

20 +

Coconut tree - 6 + chicks

GBT

flying ch - 50 +

2400

+ am ch.

cratered around island

BTC

|||||

(5)

GP

|||||

(8)

RT

||||| + 15 + 5 + 21 + 5

||||| + 20

(81)

|||||

GF

||||| + 12

1e - 11 + 35 Smaller

44 + 40 + 10 + 18 + 7 + 25 + 16

RFB

12 - 10 + 4 + 4 + 2 + 1 + 4

Smch - 5 + 2 + 4 + 4

(21)

Laysan chicks

30' x 30' - 14 chicks ea.

(500' x 500') total area

$$\begin{array}{r} 700 \overline{) 250000} \\ \underline{180} \\ 700 \\ \underline{630} \end{array}$$

$$\begin{array}{r} 32777 \\ 14 \end{array}$$

$$\begin{array}{r} 17108 \\ 2777 \\ \hline 3887.8 \end{array}$$

1 Skink (Snake Eyed) - Rock Pile

Sooty Tern

settling well in spots -

but generallyumpy

some area birds were

just settling down
population of Est

on eggs

in air

200,000 ?

500,000 +

✓ADP

Return 7-June - day

{ BFB- 508-57767-LFT leg.

♀ on small chick
around lagoon

ADP 7 June - Sooty Tern Returns - nocturnal

<u>893</u>	<u>823</u>	<u>903</u>
01678 ✓	18675 ✓	84680 ✓
09181 ✓		35436 ✓
08231 ✓		59488 ✓
04290 ✓		70472 ✓
14362 ✓		78660 ✓
06463 ✓		69191 ✓
08390 ✓		31881 ✓
01343 ✓		73958 ✓
00195 ✓	<u>883</u>	✓ 25177 ✓
12018 ✓	65113	✓ 26601 ✓
	65113 ✓	60187 ✓
	64171 ✓	46847 ✓
	65012 ✓	74476 ✓
		32849 ✓
		78625 ✓
		✓ 20399 ✓
		✓ 54126 ✓
		✓ 29197 ✓

(50) ADP LAYSAN

060843	<u>903</u>	<u>903</u>
68015	84055 ✓	87018 ✓
68367 ✓	47201 ✓	34808 ✓
68842 ✓	41701 ✓	49665 ✓
10113	80123 ✓	
10014	71237 ✓	
68983 ✓	47771 ✓	
65888 ✓	✓ 34150 ✓	
	60170 ✓	
	45966 ✓	
	87031 ✓	
	38996 ✓	
	23068 ✓	
	51635 ✓	
	95519 ✓	
	88787 ✓	
	64498 ✓	
	42349 ✓	
	87270 ✓	
	52284 ✓	

✓ ADP
Laysan Teal

615-65555

BFB

✓ 757-89433- ♀ S.D.C.H.

✓ ADP

7 June - Sooty Tern

903

60891 ✓

88124 ✓

25077 ✓

84448 ✓

42435 ✓

52998 ✓

52830 ✓

61715 ✓

86695 ✓

42529 ✓

23220 ✓

22644 ✓

38298 ✓

54027 ✓

79897 ✓

87242 ✓

38485 ✓

40908 ✓

64034 ✓

53910 ✓

903

33737 ✓

64204 ✓

31764 ✓

27788 ✓

26897 ✓

50359 ✓

41312 ✓

68783 ✓

80325 ✓

65408 ✓

903

Returns 51-59 (110) layers

✓ ADP
adults

nocturnal

893

14914 ✓

00922 ✓

03988 ✓

05194 ✓

06775 ✓

10933 ✓

11039 ✓

843

66790 ✓

69582 ✓

64272 ✓

61547 ✓

64540 ✓

61022 ✓

67407 ✓

863

65675 ✓

74868 ✓

64067 ✓

66112 ✓

72491 ✓

71655 ✓

77443 ✓

823

7 June

WTS -

New Band

645 Return

705-14798

→

06459

14771

10062

Returns (vs) Rebands

ALL on ADP ✓

8 June - Returns

903	903	893	863
43868	54333	02633	65818
45966	27159	06188	74763
45611	85785	12897	72076
24491	51204	05124	63716
75235	37138	13996	66106
57994	62519	02344	61574
27159	72918	07649	65113
89623	51954	02546	72679
52579	34381	06140	74682
42349	32194	10896	74801
53536	47186	05115	69104
39246	80828		
47181	35148		
24491	61430		
28182	49822		
60170			
34621			
60886			
52390			
29807			

(62 returns) ✓ ADP

- Sooty Tern - diurnal

823	843
17967 ✓	62648 ✓
17928 ✓	68878 ✓
01193 ✓	66566 ✓

✓ADP

June - Returns Sooty

(3)

(4)

(8)

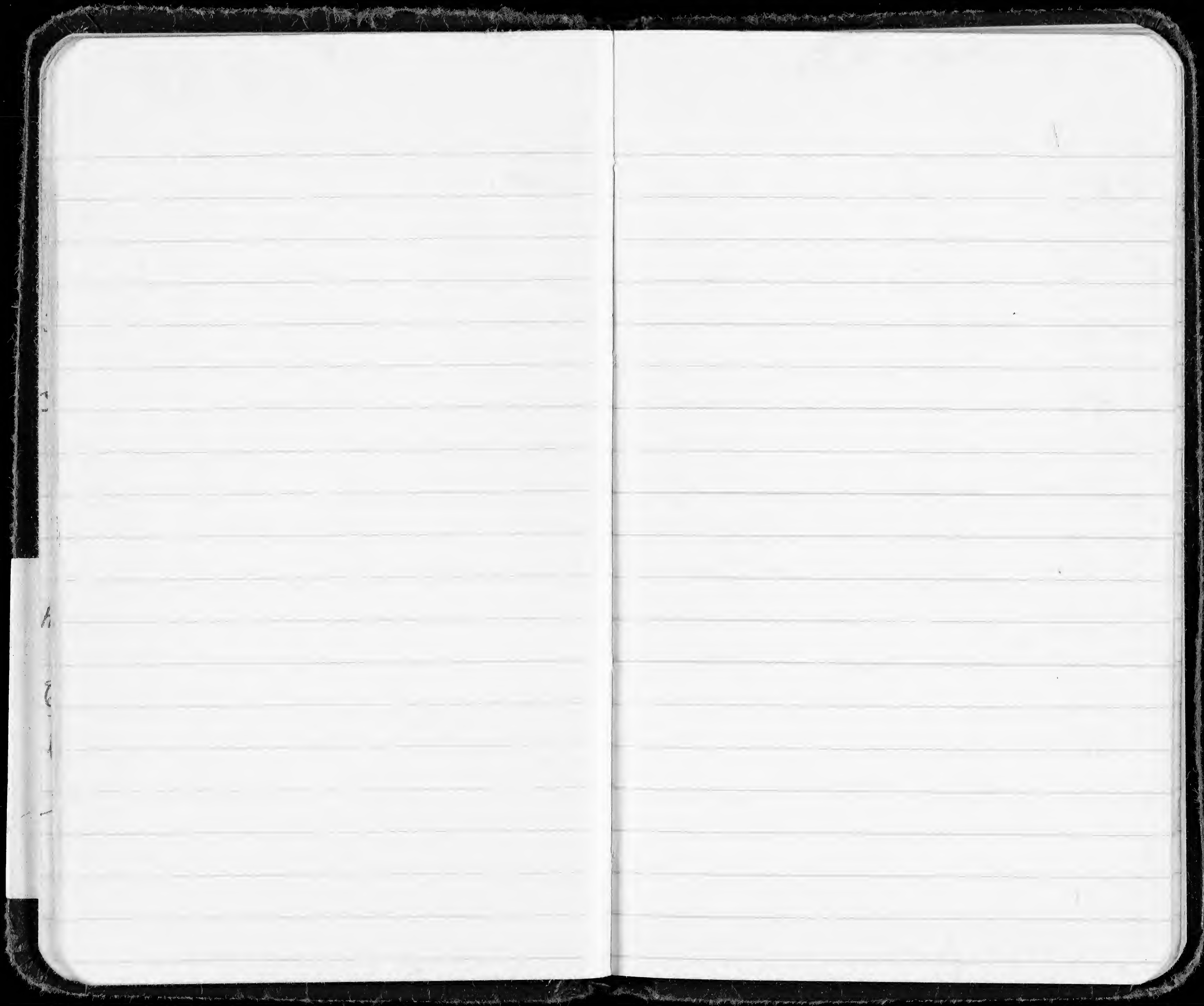
903	903	893	863
24979	31910	08873	60833
79869	59290	13880	66837
71457	59190	10771	60145
59962	88737	02791	60949
74979	54656		64203
86526	24453		66760
40403	76947		64479
32697	38407		73561
82142	24230		
22914	69085		
41436	62947		
84273	50018		
50957	28661		
70259			
68732			
86963			
28552			
24736			
88107			
32458			

(48 returns) ✓ADP

Tern - Journal

(3)

843	823
65810	
66969	
63508	



~~First 500~~
ALL on ADP ✓

11 JUNE - NOCTURNAL

903	(60)	903	893	(22)
81537		84654	02588	
66335		80524	05688	
30964		25789	10760	NOTE
87192		54073	05917	
48068		65339	01569	
26493		59900	01513	
30877		35608	14127	
64232		89024	14063	
38420		84377	03136	
48175		73377	12353	
29804		66736	00666	
57833		20050	09324	
66403		37848	09839	
52023		67329	13396	
37043		57032	03136	
78128		67859	09839	
20792		71376	12732	
44989		53515	05644	
31559		70547	12756	
43141		55500	01513	
		41064	03400	
53108		51535	13055	
40894		24506		
85317		37551		
55007	43007	76378		
54581	42018	54026		
39364		72246		
42019		04482		
42040		74857		
		24675		

ALL on ADP ✓ LAYSAN

returns Sooty Tern ADULTS

863	(17)	843	(1)	823
65869		67572		
69187		65132		
66922		69558		
66576		69230		
63601		68309		
60565		61968		
68374		68740		
63221				
74477				
64045				
60420				

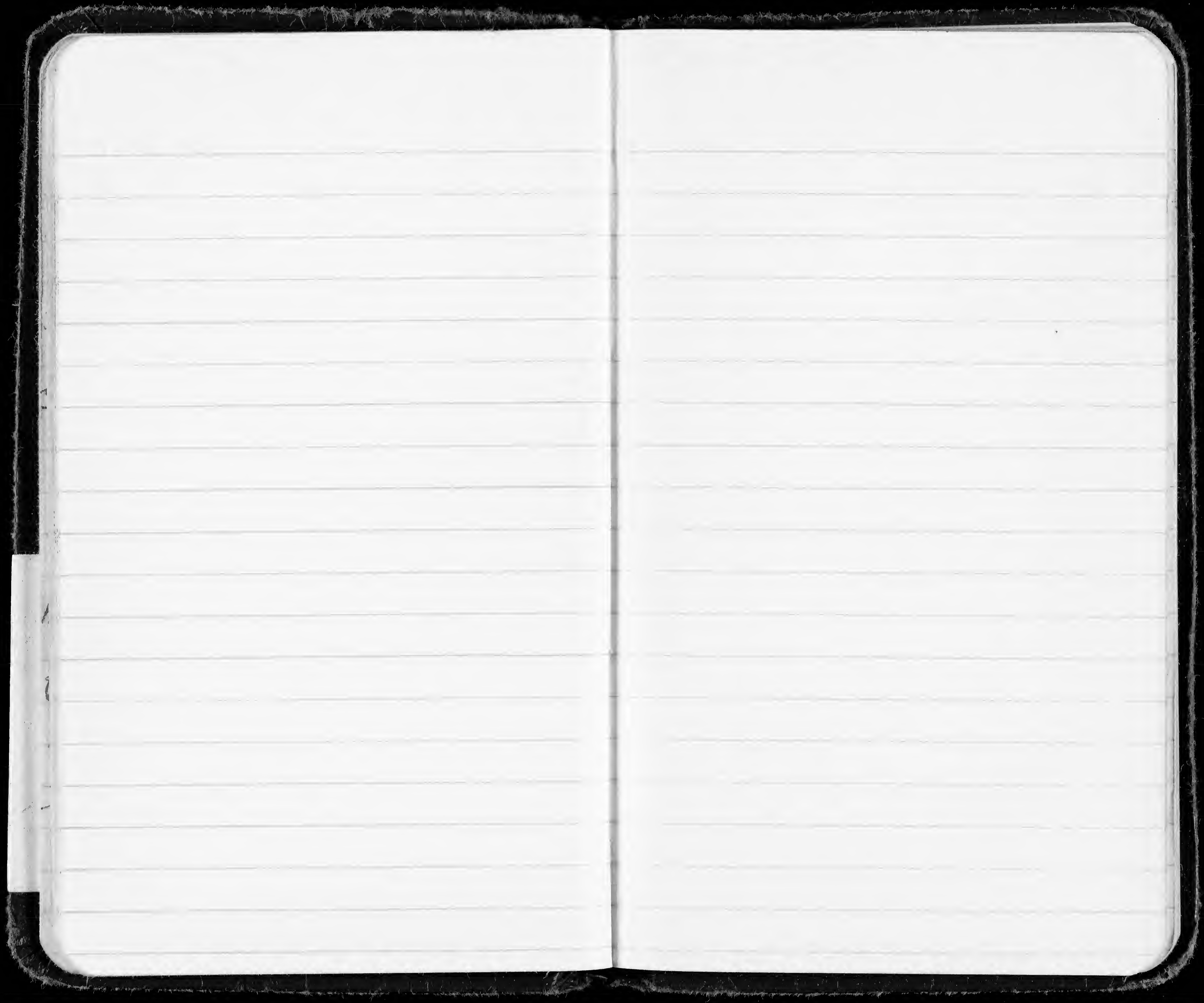
943
18114*

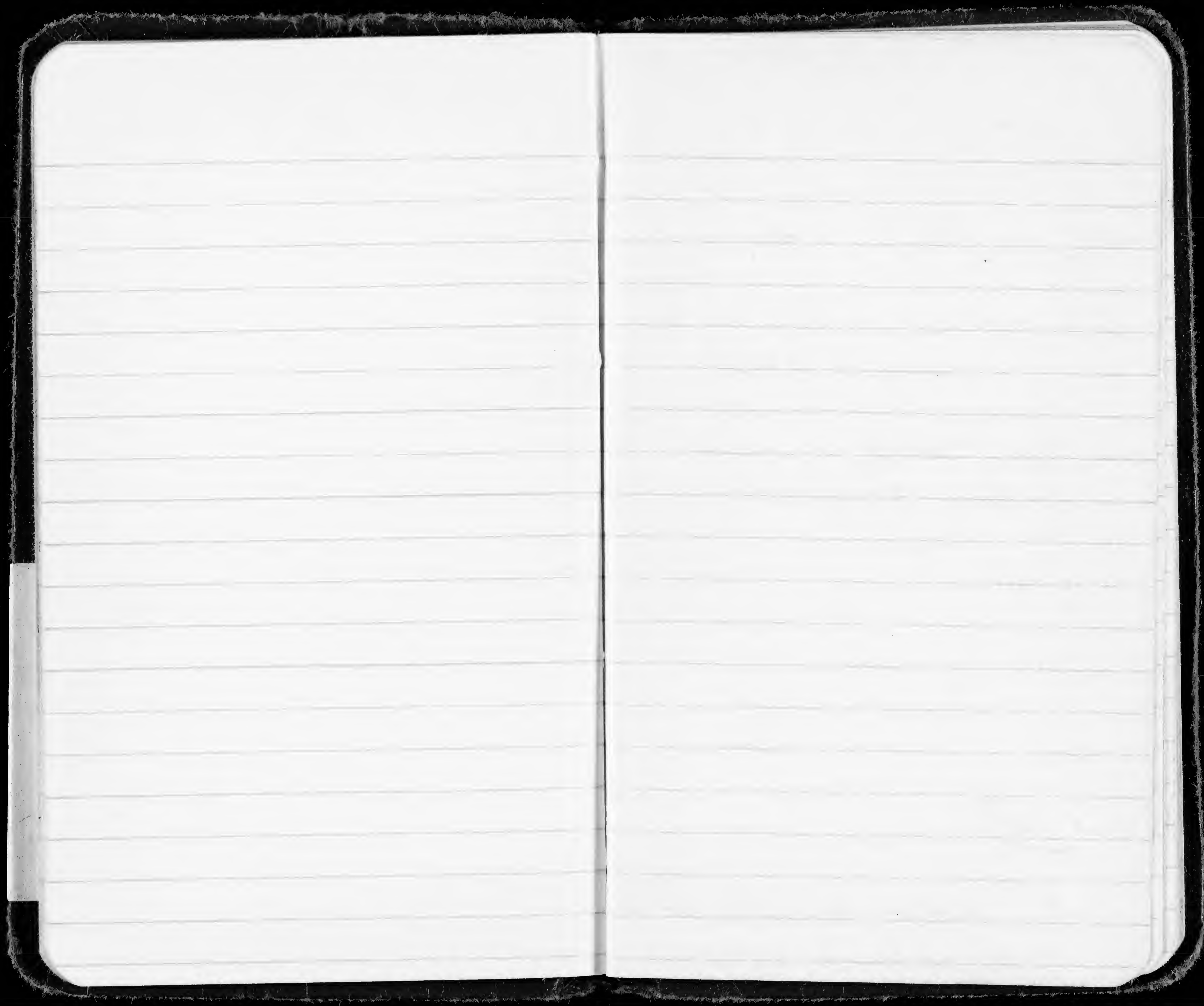
SECOND 500

14 JUNE - NOCTURNAL
903 903 893

LAYSAN

RETURNS Sooty Tern ADULT
863 843 823





10 JUNE - Botanical SURVEY

Scaevola taccada - ~~small~~ (small white flowers) 2-3 1/2' high

Casuarina equisetifolia - directly behind syn - 15' high - 35' diameter
in good condition

Nicotiana glauca - common behind Scaevola - going to seed - some
buds and flowers remain. (pink) 3-4' high.

Fimbristylis

Boerhaavia

Tribulus

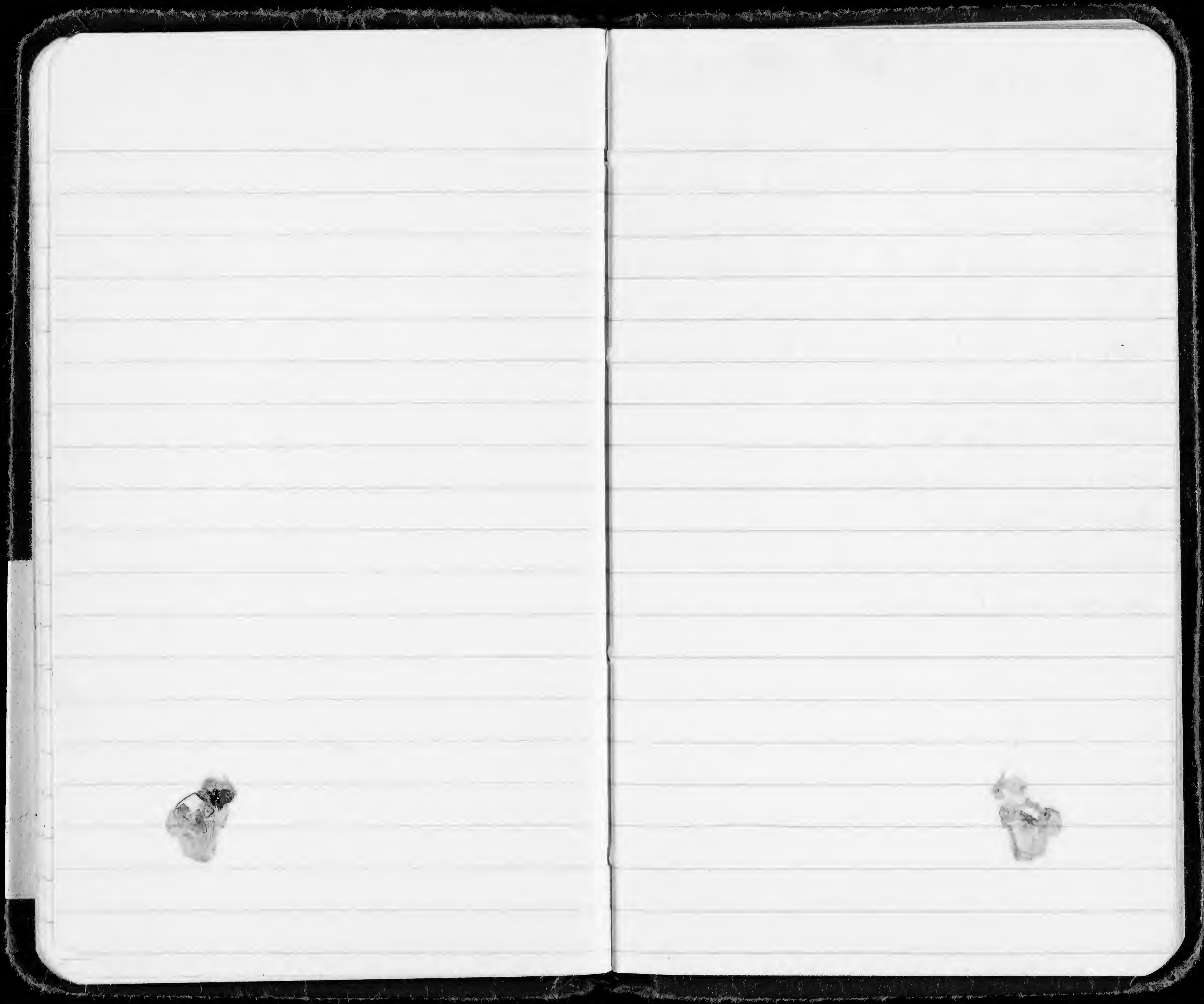
Eragrostis

Palm (Coco) - North end of island
with green - nuts

Trees (Gu) - 20-30' high -

Portulaca

Sesuvium



10 June

Plant Utilization By Avifauna

Scaevola

(under or on branches)
Common Noddy (under)
Gray Backed Tern (under)
Red Tailed Tropic Bird (under)
Fairy Tern (on)
Great Frigate (on)
Red Footed Booby (on)
Brown Booby (ROOSTS) (NESTS around area)
Hawaiian Noddy (on)
Wedge Tail (burrows under)
Laysan Finch (MIST)

Casuarina

Hawaiian Noddy
Fairy Tern (R)
Laysan Finch (R)

Palm (Cocos)

Hawaiian Noddy (N)
Frigate (R)
R.F.B. (R)
Finch (foraging)
WTS (under) dried fronds

Eragrostis

WTS (under clump)
Finch (N) clump
Sooty T - around ^{base}
G.B.T. " "
C.N.T. uses for ^{nest} material

Tribulus

G.F. - For nest material

Portulaca - used by Brown Booby
for nest.

Scaevola - used by R.F.B.
for nest.

Bush at N end

R.F.B (N) 59/10 nests - 4-5' high

daysan Finch - numerous in its branches

Species Found Laysan
7-11 JUNE '67.

Great Frigate

Brown Booby

Blue Faced Booby

Red Footed Booby

Laysan Albatross

Black Footed Alb.

Wedge Tail

Christmas Is.

Bonin Is.

Bulwer's

Common Noddy

Hawaiian Noddy

Fairy Tern

Sooty Tern

Laysan Teal

Laysan Finch

Gray Backed Tern.

Bristle Thigh

Golden Plover

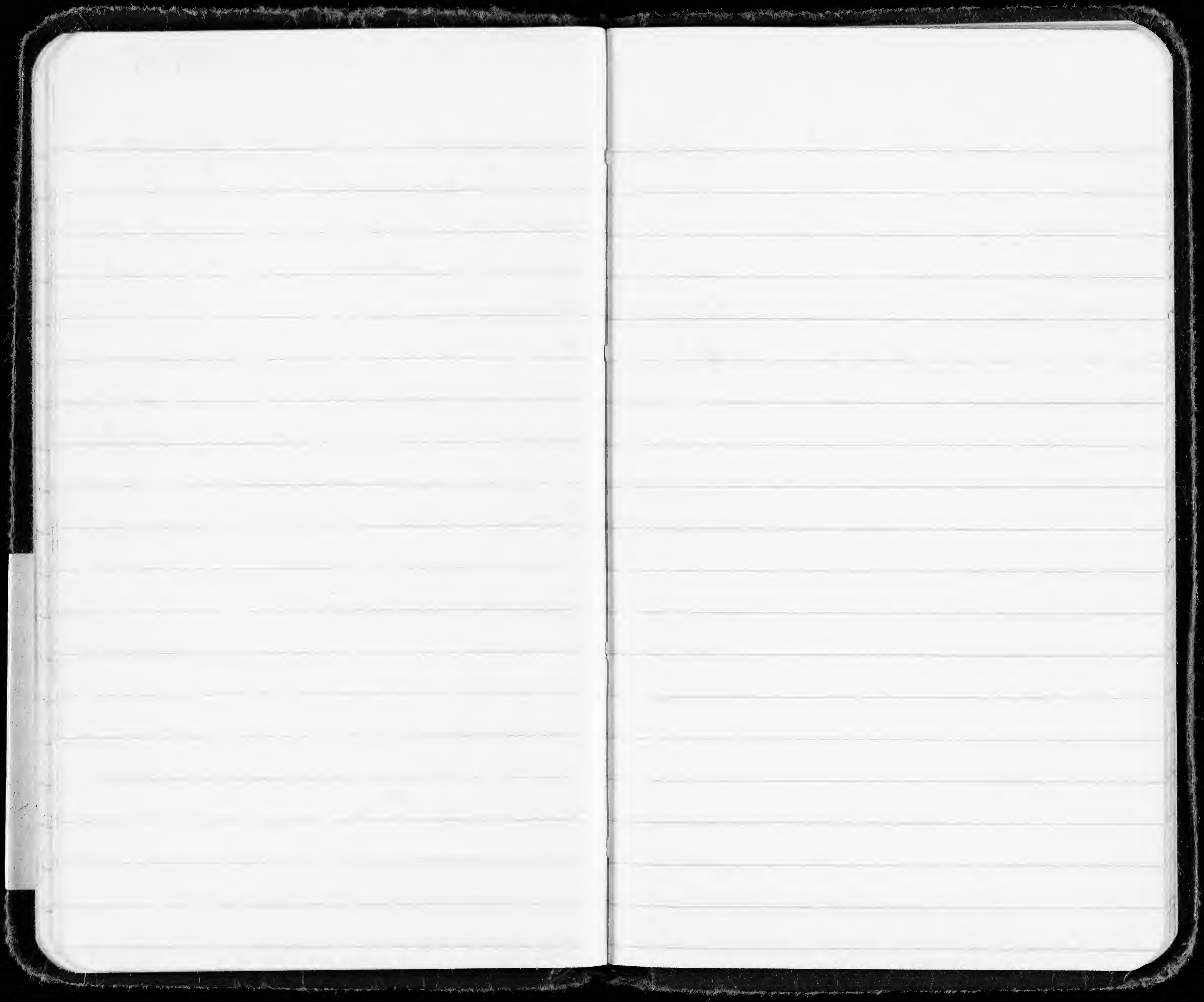
Ruddy Turn.

Wandering Tatt

Seal

S. Eye Skink

Chelonia mydas



Casuarina tree island

sign - 19 June '67

Anous minutus

COUNT

ADULTS

CHICKS

NESTS

EGGS

80+

44

100+

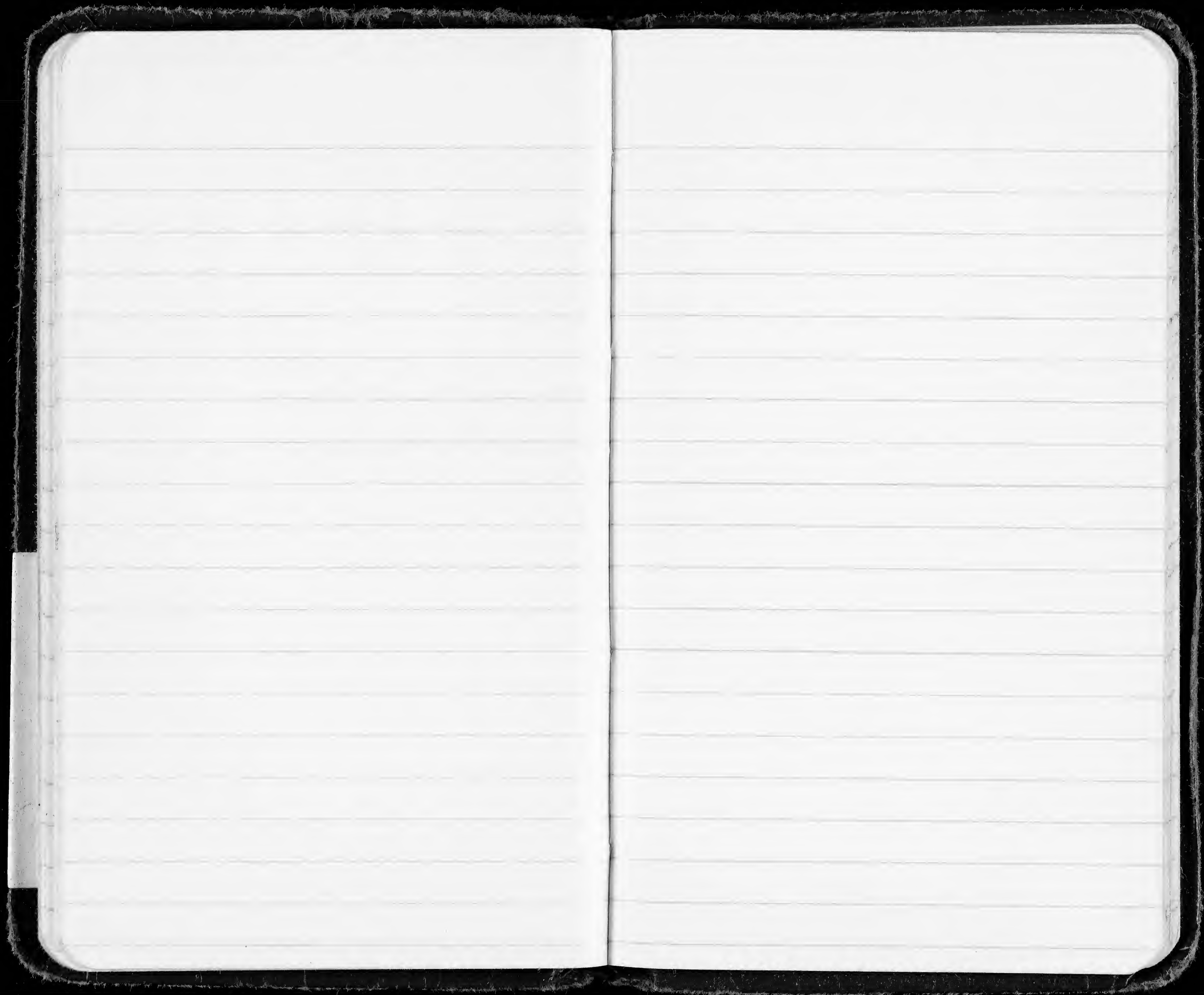
1

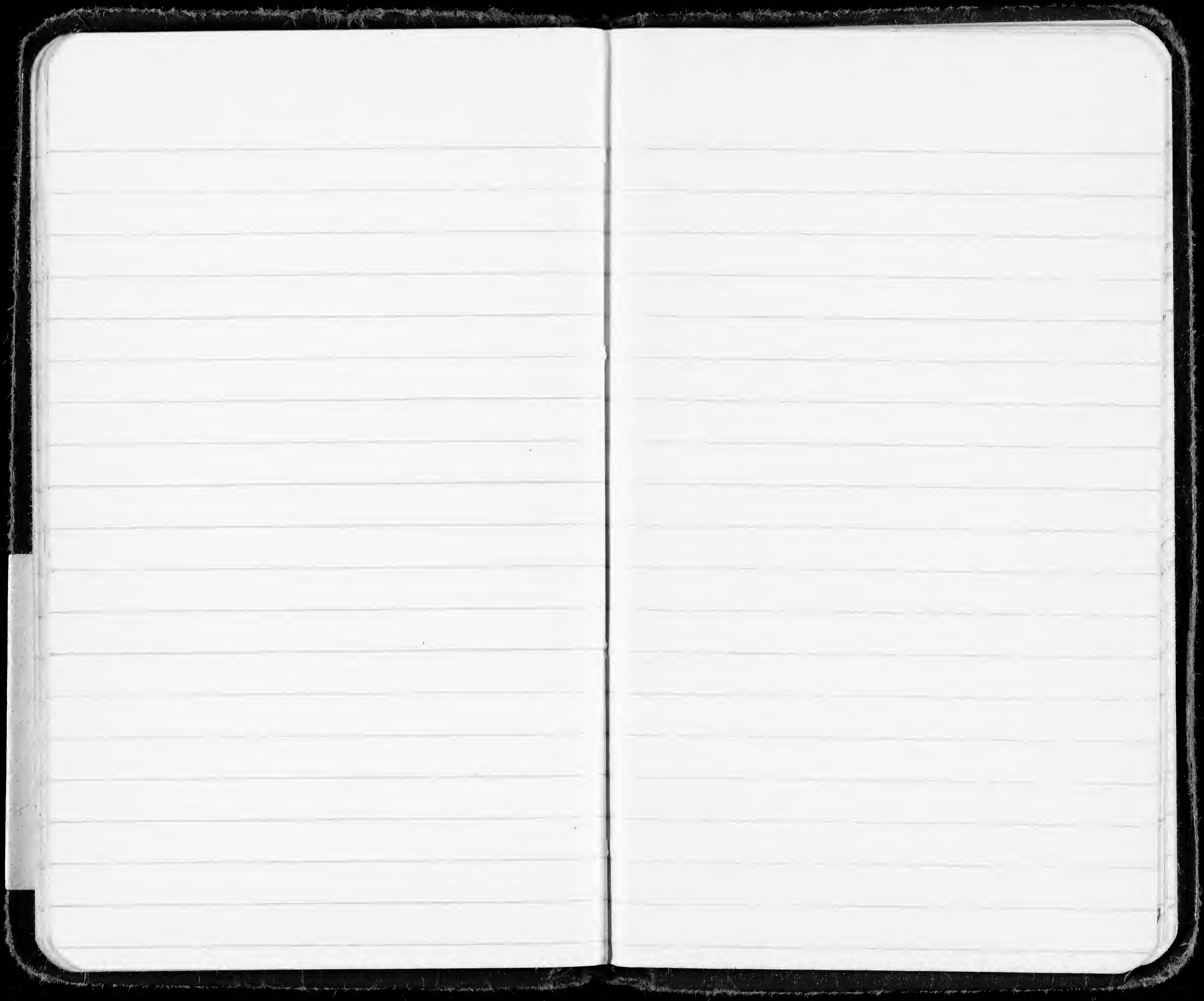
11 June -

© Laysan frigate predation
@ colony behind camp.

on Sooty Tern eggs

areas checked showed
about 30% later
eggs





SERA

Samples

8 June '67

LAYSAN

200 Total

1	BFB	adult	F
2			F
3			F
4			M
5			F
6			U
7			M
8			F
9			F
10			M
1			F
2			M
3			M
4			F
5			M
6			F
7			F
8			M
9			U
20			F

VADP

roost.	New Band 757-30361	✓
	62	✓
one egg	757-29015	✓
Prob - 587-80454	→ 587-08454	✓
	63	✓
	757-29014	✓
	64	✓
	65	✓
	587-80453	✓
	66	✓
2 eggs	67	✓
	587-80452	✓
	68	✓
	69	✓
	70	✓
	71	✓
	72	✓
	73	✓
	74	✓
2 eggs	767-41297	✓

VADP

21	BFB	adult	F
2			F
3			M
4			M
5			M

6	Great Frig.	M
---	-------------	---

7		SA
8		F

9		M
---	--	---

30		SA
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7		F
---	--	---

32		M
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33		F
----	--	---

34		F
----	--	---

5		F
---	--	---

6		F
---	--	---

7		M
---	--	---

8		F
---	--	---

9		K
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40		S
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	75
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<u>naked black</u>	76
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	77
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egg	78
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	79
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Reort.	New Band	587-83844
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	40
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	46
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	47
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	48
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	49
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	56
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	57
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	58
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#63 Female not Bled

41	Great Frig.	adult	M
2			F
3			m
4			m
5			m
6			m
7			m
8			m
9			m
50			m
1			<u>m</u>
2			m
3			m
4			m
5			m
6			m
7			m
8			m
9			m
60			m

Roost	587-838	59
		60
		61
		62
		64
		65
		66
		67
		68
		69
		<u>70</u>
		71
		72
		73
		74
		75
		76
		77
		78
		79

61 Great Frig

2	1	M
3	1	M
4	1	F
5	1	M
6	1	M
7	1	M
8	1	M
9	1	M
10	1	M
11	1	M
12	1	M
13	1	5 F
14	1	M
15	1	M
16	1	5 F
17	1	M
18	1	M
19	1	M
20	1	F

Roosting

587-838 80

81
82
83
84
85
86
87
88
89
90
91
92
93
94
<hr/>
95
96
97
98
99

81 Great Frigate

2 1
3 1
4 1
5 1
6 1
7 1
8 1
9 1
10 1
11 1
12 1
13 1
14 1
15 1
16 1
17 1
18 1
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94 1
95 1
96 1
97 1
98 1
99 1
100 1

M
M
M
F
M
F
M
M
F
F
M
F
SA
M
F
M
M
M
M
F

82 NOT BLED

New Band 587-88900

New Band 757-30380

81
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99

107 Great Frigate

SA

Roast

New Band 757-30400

2

AM

NB

757-30401

3

M

02

4

M

03

5

F

04

6

F

05

7

M

06

8

M

07

9

M

08

110

M

09

1

M

10

2

M

11

3

M

12

4

M

13

5

M

14

6

M

15

7

F

16

8

M

17

9

SA

18

120

M

19

121 Great Frigate

M

F

M

M

~~F~~
F

M

F

F

M

M

F

M

F

M

M

M

M

A

A

Roost

New Bang 757-3 0420

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

39

38

2

3

4

5

6

7

8

9

130

1

2

3

4

5

6

7

8

9

140

141 Great Frigate

F

m

F

F

m

m

F

m

m

m

u

2

3

4

5

6

7

8

9

100

1

WTS

2

3

4

5

6

7

8

9

100

Roost:

Band #

40

41

42

43

44

45

46

47

48

49

New Band 705 - 14201

02

03

04

05

06

07

08

09

10

161 WTS

2 1

3 1

4 1

5 1

6 1

7 1

8 1

9 1

170 1

1 1

2 1

3 1

4 1

5 1

6 1

7 1

8 1

9 1

4 1

180 1

New Barrid 705 - 142 11

12

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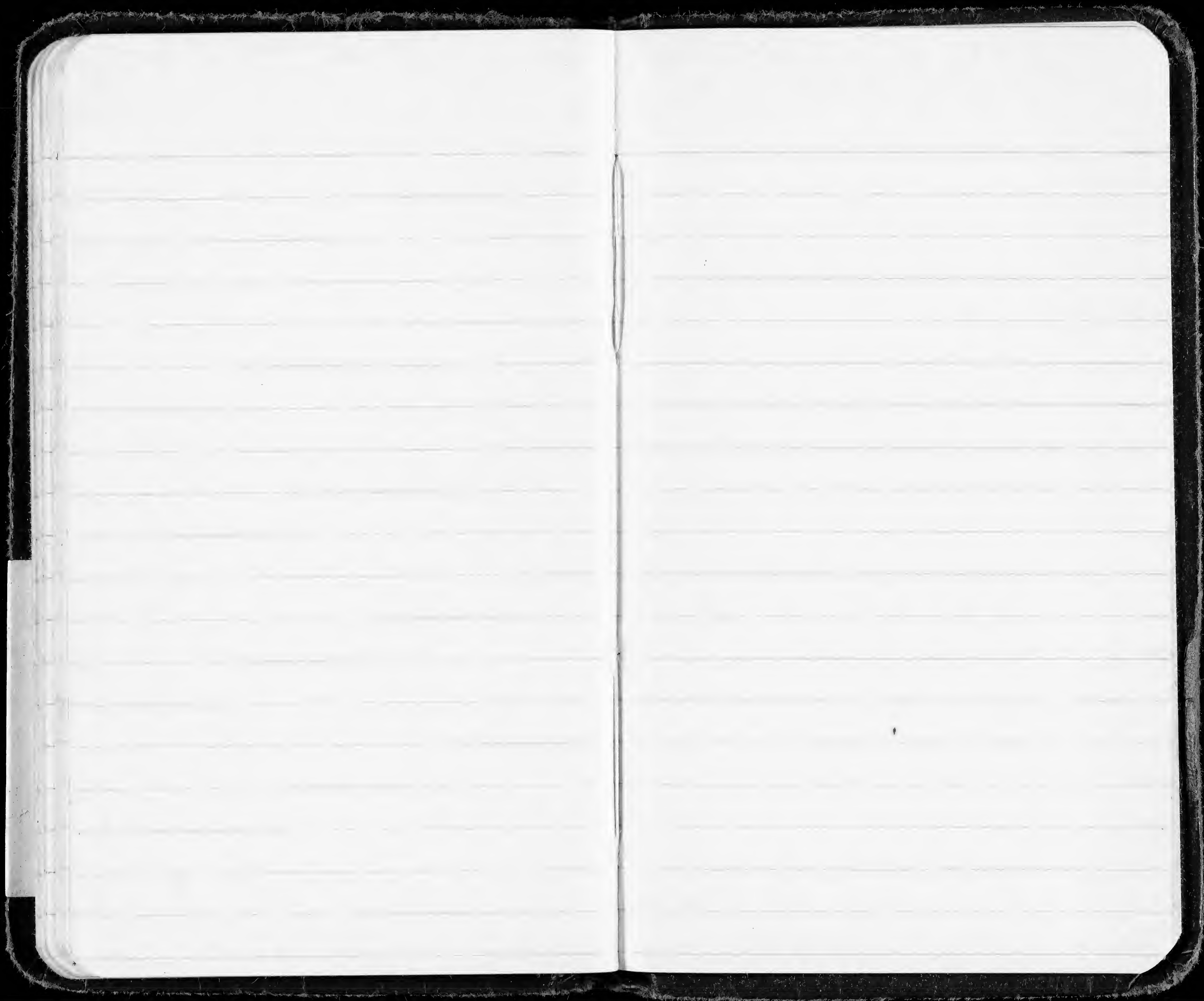
30

181 WTS

2	
3	
4	
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190	
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200	

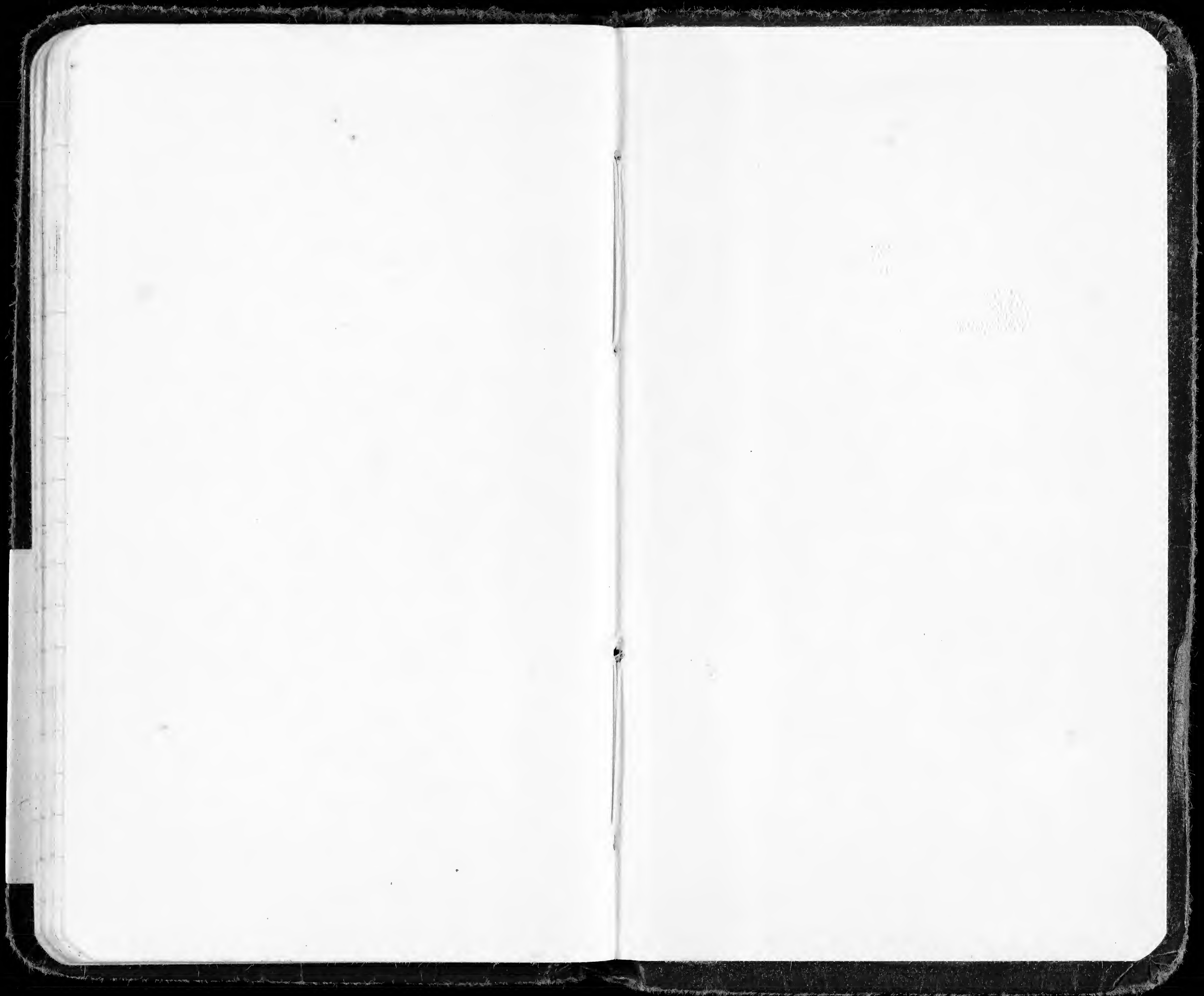
New Band 705 - 142 31

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50









7530-2
FEDERAL SUPPLY SERVICE

Memoranda

Leewards # 19

Laysan Island

7-13 June 1967

D. L. Stadel

©

Love
CDH

~~Great Frigate~~

~~OE | SN | SD | MAD | KD~~

~~4-8-22 2-6 3-7 4-2~~

~~6-5 2-3 15-5~~

~~10-3 1 10-5-5~~

~~15-15 2-3 5-8~~

~~5 2 7~~

~~15 -4 10~~

~~108 25 80 6~~

7 June Nest Survey

BT Booby

OE	ONE	SNC	SDC	MD	LD
III	IIII	IIII	III	III	
III	IIII	IIII	IIII		

12

15

12

4

RFB

OE	SNC	SDC	MD	LD
III	III	III		
III	III	III		
III	III	III		
III	III	III		

18

3

8

Brown B

OE	SN	SD	MD	LD
----	----	----	----	----

RTTB

OE	SD	MD
----	----	----

5

~~Comm N
5-30-50-50-20~~

155

~~Haw N Roosting
500~~

~~OE 5~~

~~SD 5-20~~

~~MD 20~~

~~LD 20~~

~~Fairy T
OE-5~~

~~GBT
Flying Imm
Eggs~~

BF Albatross

1-20-70-50-40-50-100

50-100-100

580

Lag 54n

50-50-50-50-50-50-50-50

50-50-50-50-50-50-50-50

50-50-300-100-80-100

50-150-100-50-100-50

~~2000~~ - 100

1150

1950

2000

800

~~3950~~

2350

GP

RT

BTE

WT

Teq/

Sooty Tern

Preparing

Sitting

1000-1000

100 8/0000 \$
20

Nests

1000-1000

7
3050
144/540000
432
1080
1808
720
720

Southend

400 yds long 100 wide

sm ch at NW end

Best sites around Eragone

~~300 x 100~~ mostly eggs

~~at~~ interval Density follows

300 x 50

2000 x 25

12 ft density

24

2000
30

90000
9

540000 sq ft
81

Alb Density

Laysan 170
50000

BFA - 120
20000

150 X 50

7500

~~300 Laysan BFA 100~~

~~60 X 50~~

220
146

360

208

7508
720

300.0
2880

Sooty Tern

Bands Issued
993 - 46001 - 46500
46501 - 47000

✓ Nesting Birds

✓ Wedgetails - No Status
705 - 14901 - 15000

705 14984 New Band on
635- 19525 old Band

✓ADP Sooty Tern Return (18)
903 - 36717 (20) E

56044 ✓ ~~Testing Colony~~

77601 ✓ - 86304 ✓

66905 ✓ - 88243 ✓

45944 ✓ - 79698 ✓

87437 ✓ - 81785 ✓

54869 ✓ - 58287 ✓

45892 ✓ - 36345 ✓

66449 ✓ - 69802 ✓

68016 ✓ - 37362 ✓

68946 ✓ - 47288 ✓

70493 ✓ - 24837 ✓

59817 ✓ - 57727 ✓

67356 ✓ - 81173 ✓

76240 ✓ - 49306 ✓

80743 ✓ - 51616 ✓

80845 ✓ - 12386 ✓

89535 ✓ - 25438 ✓

63356 ✓ - 30295 ✓

73368 ✓ - 47890 ✓

✓ADP (7)

863 - 67508 ✓ 60463 ✓

~~14779~~ 65884 ✓

63606 ✓ 73905 ✓

68176 ✓ 65497 ✓

70481 ✓

893 - 14179 ✓ 08856 ✓

02372 ✓

07569 ✓ (4)

843 - 65527 ✓ (4)

64201 ✓ (4)

82173 ✓

61473 ✓

823 - 13990 ✓ (1)

44 Bonin Islands

~~705 149 84 New~~
~~635 195 25 Id~~

[illegible]

Coconut

Eng	Scot	Ban	Tri	Ipom
-----	------	-----	-----	------

Comm

Association

Under

Erag

Scae

Erag

11 on

11

11 on

Erag

11

11 on

11 on

11

11 on

11

Scae

Erag

Trip

Boer

Porty

T. p. m. e. r.

Onion

✓

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Noddy

Nest Mat

Erag

Scae

Boer

Trip

Iron

✓

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✓

Grey backed Tern

under

I

Ipom

11

6

1

11

Erag

Turb

Scene

Ipom

Gh/14

✓

✓

✓

✓

✓

✓

✓

✓

✓

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✓

Sooty Tern

Density

1.2	1.2	500	500.5
544	842	1044	1044
1 18	101	5	10
20	6	10	10
8	8	8	15
3	8	8	8
4	8	10	6
1	10	8	1.5
3	8	8	10
6	6	8	10
2	6	8	1.5

Density could increase 4 times

$$\begin{array}{r}
 70 \\
 54 \\
 71 \\
 124 \\
 \hline
 319
 \end{array}
 \begin{array}{r}
 1.2 \\
 44 \overline{) 319} \\
 \underline{308} \\
 11
 \end{array}$$

40000

9

360000

49438

7.2 $\overline{) 360000}$

292

680

648

320

292

280

216

640

Alb Density

40 x 80

100 - 100 - 100 - 100

150 x 40

100 - 100 - 100 - 100 - 100 - 100

100

150 x 90 -

100 - 100 - 100 - 100 - 100

100 - 100 - 100 - 100 - 100

100 - 100 - 100 - 100 - 100 - 100

2700 Alb in

22700 sq yds

One Nest per 8.4 sq yds

3200

6000

13500

22700 sq yd

2700 $\sqrt{22700}$ 8.40
21600

11000

0800

2000

6.30

41
3600

22700

21600

11000

10800

2000

2700 is 2520

*

2700

25

X

100

3600

75 $\sqrt{270000}$

225

450

2

RFB

Nest Mat

04	SK. B.	Boer	Eest	Ipom	H	trip
	11	✓	✓	⊙	3.5	✓
	11	✓	✓	✓	3.5	✓
	11	✓		✓	4	✓
	11	✓		✓	4	✓
	11	✓			4	✓
	11	✓	✓	✓	4	✓
	11	✓	✓	-	4	✓
	11	✓	✓	⊙	3	✓
		✓			3	✓

8 June

Black-footed Albatross

757 33701-33800

33801-33900

✓ 33601-33700

New Banding
Chicks

150
~~200~~ wide 450 long

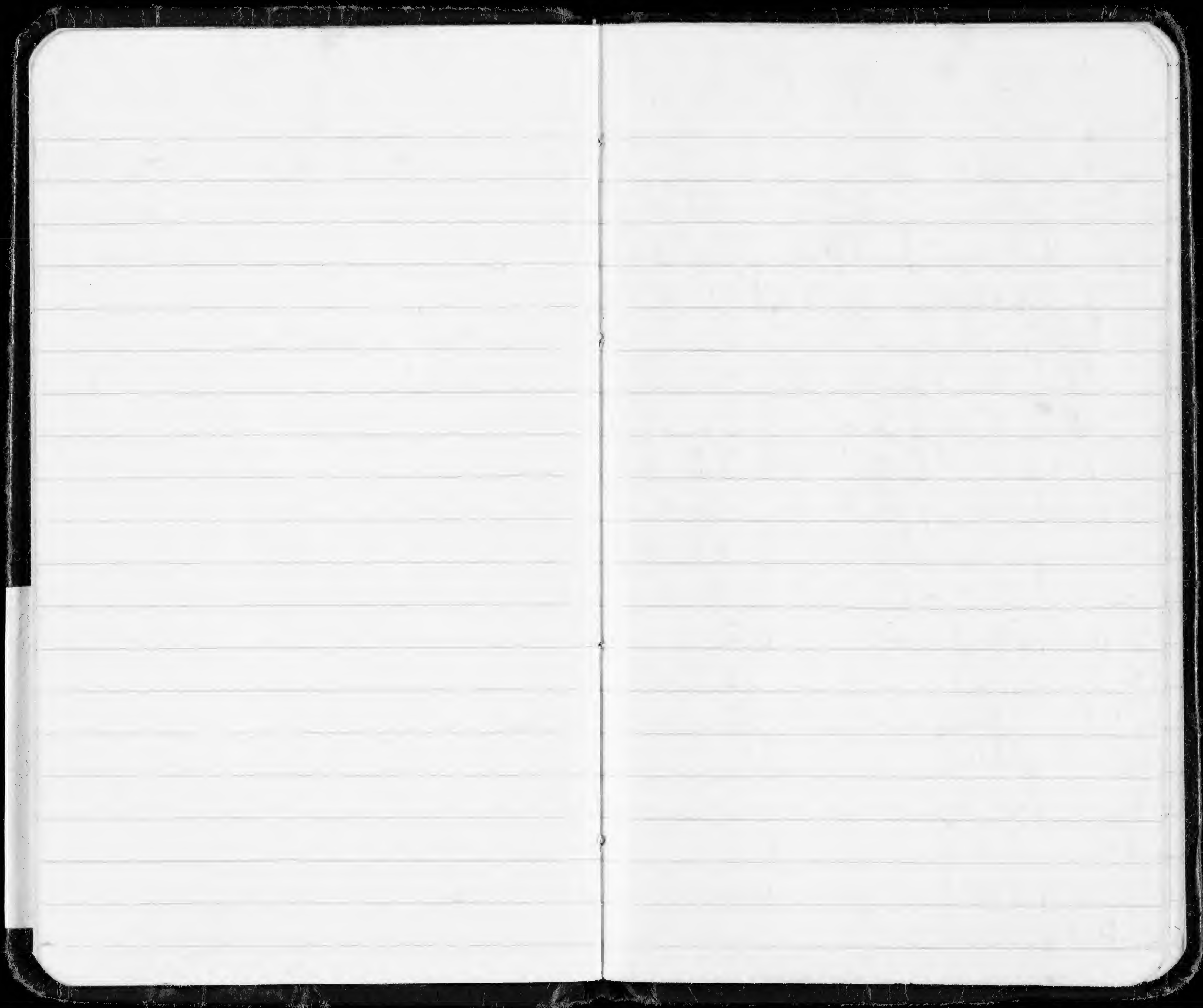
continuous

100 wide x 400 long

Density 9.1 ft

8	8	10	20
2	4	8	15
3	20	15	20
8	8	20	25
2	5	10	15
2	5	20	15
8	10	15	15
1	2	10	20
3	6	8	10
5	3	10	8
3	8	6	20
45	81	141	208

89
52 | 475
468



Com No 2

Leng	w	L	w
55	37.7	50.6	35.5
55.4	36.4	54.6	35.9
50.4	36.0	53.5	36.7
53.9	35.9	54.2	36.7
52.1	39.7	51.4	36.3
54.1	37.4	53.0	36.4
53.9	35.7	56.8	37.3
55.1	35.1	52.5	34.4
52.5	36.0	51.4	36.5
52.7	38.0	52.7	36.5
53.9	38.9	50.9	35.1
54.9	36.3	52.2	37.3
51.8	37.0	52.5	36.3
52.7	37.2		
56.5	37.7		
51.4	36.0		
53.9	35.9		
54.3	37.0		

Red-foot Pig

L	w	L	w
56.9	41.4	61.8	43
58.2	41.7	61.7	40.1
65.4	42.4	66.1	43.2
64.7	41.1		
62.1	49.8		
61.0	41.1		
67.9	40.3		
58.1	39.4		
61.3	41.4		
63.0	40.0		
66.3	41.9		
59.9	37.1		
64.6	40.2		
58.8	41.3		
66.5	41.6		

Fing 299

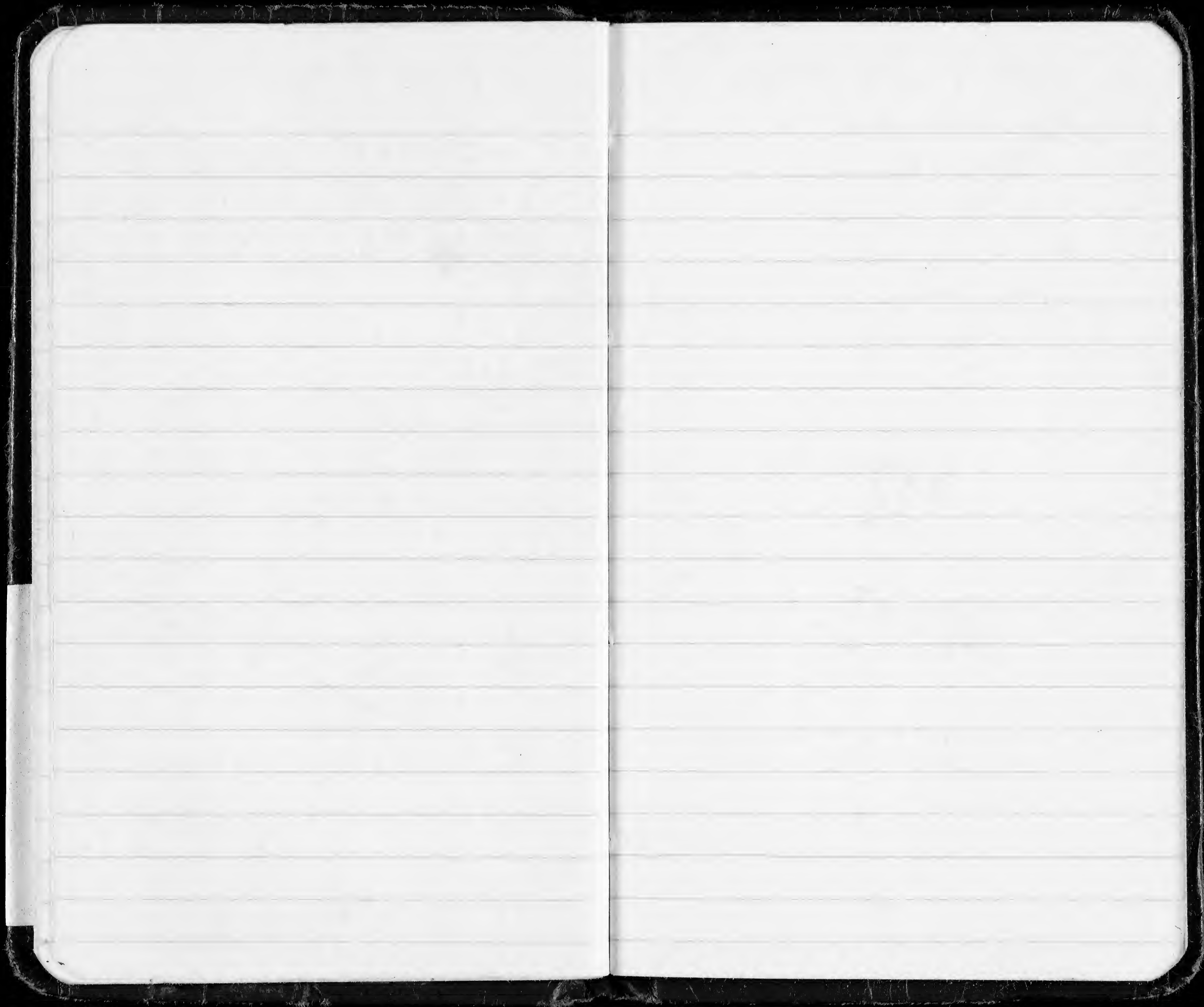
Red-foot Return
✓ADP

L 68.8	W 48.8	L 73.9	W 47.6
69.6	47.3	68.2	47.0
69.2	48.5	68.9	47.4
68.0	47.7	66.9	46.6
59.3	49.9	70.7	48.6
72.7	50.9	70.9	49.5
69.3	48.5	66.9	44.9
71.4	47.6	70.5	47.4
72.3	48.1	67.7	47.5
74.1	49.2	72.3	47.1
79.0	45.8	70.1	48.5
52.7	38.0	61.3	41.1
56.2	46.9	50.9	50.9
54.1	48.3	69.8	
68.2	47.3		
67.8	47.9		
68.3	48.4		
70.7	46.5		
78.4	43.1		

✓757-28108 SD

✓767-41456 SNC

64.4 ✓767-41094 OE



9 June came down
 Sooty Tern colony
 NE corner,
 350 x 40
 Few ~~10~~ eggs
 Copulation
 3 ft density

$$\begin{array}{r}
 350 \\
 46 \\
 \hline
 140009
 \end{array}$$

$$\begin{array}{r}
 126000
 \end{array}$$

91

800,000

16

49438

8000

106758

10

174196

1750000075

x 100

$$\begin{array}{r}
 233333 \\
 95 \overline{) 750000}
 \end{array}$$

150

250

225

250

Wedgetail Banding again

705-14301-500

Adults



~~W T Brood Patch
Covered 7-9-7-7~~

~~Med 2-1-2-3~~

~~Incub 1-1-~~



Banding 9 June

Blue-faced Booby

757- 30450

50 - NO ♂ SNC	68 ♂ PW/67
51 ♀ RC	69 ♀ R
52 ♀ RC	70 ♀ SNC
53 ♀ RC	71 ♂ 2E
54 ♀ RC	72 ♀ SNC
55 ♂ RC	73 ♀ OAE 2R
56 ♂ RC	74 ♂ OAE
57 ✓ ♂ RC	75 ♂
58 ♂ RC ✓	76 ♂
59 ♂ "	77 ♂ MDC
60 ♀ "	78 ♂ SDC
61 ♀ +	79 ♀ R
62 ♂	80 ♀
63 d R	81 ♀
64 ♂ R	82 ♂
65 ♂ SNC	83 ♂ LE
66 ♂ R	84 ♀ SDC
67 ♀ +	85 ♂ R

86 - ♀ R

87 - ♀ R

88 - ♀ R

89 ♀ R

90 ♂ R

91 ♀ R

92 ♀ R

93 ♂ R

94 ♀ LDC

95 ♀ R

96 ♂ MDC

97 ♂ R

98 ♂ R

99 ♂ R

100 ♂ IE

9 June Return
✓ADP Blue Face Booby

757 - ✓ 28178 ♂ RC
- ✓ 28176 ♀ RC
✓ 28181 + RC
✓ 28187 ♀ OE
✓ 25529 ♀ SNC
✓ 28180 ♂ R
PS 2 ✓ 28193 ♂ BNE
✓ 28189 ♂ SNC
✓ 28190 ♀ SNC

767 ✓ 41384 ♂
✓ 41265 ♀ SDC
✓ 41189 ♀ R
✓ 41293 ♀ SDC
✓ 41329 ♀ R
✓ 41280 ♀ SDC
✓ 41183 ♂ R
✓ 41324 ♀
✓ 41127 R SNC NB 82
✓ 41343 ♂ SDC NB 81

✓ADP

587 - ✓ 80491 ♂ 767 2P 41329P
✓ 80429 ♀ RC
✓ 80445 ♀ RC
✓ 80425 ♂ R
✓ 80436 ♀ R
✓ 80486 ♂ 2E
✓ 80474 ♂
✓ 80485 ♂ (SDC) 3P
✓ 80482 ♀
✓ 80492 ♀ 767 41293 3P

757 - ✓ 28182 ♂ R
✓ 28191 ♀ R
✓ 25534 ♂ OE
✓ 28188 (587 80436 R) ♂
✓ 25536 (767 41189 P) ♂
~~255~~
✓ 25542 ♀ 2E
✓ 89468 ♂ R
✓ 89471 ♂ R

✓ADP

Blue-faced Booby Return

✓587- 80487 ♂ OE

✓80495

✓80500 ♂ SNC

✓80493 ♀ SDC New B
SO

✓80451 ♀ w/ 767-41342

✓80417 ♂ R

767- 41122 ✓

41335 ✓

767- 41147 ✓

41348 ♂ IE, INC

41165 ♂ NB 84

508- 51767 ♂ 2E

Non-PoBSP

767- 41173 ♂ R

517 41342 ♂ SDC

41352 ♀ NB 94

41151 ♂ 2E NB 95

517 785

✓ADP

757 -

895 ~~80~~

♂ SNC

✓894 95

♂ R

5890 25

♀ SDC

767- 413 45

♂

89016

♂ R

767- 41360 ♀ R ✓

767- 41556 ♀ R ✓

508- 51785 ♀ R - Non PoBSP

ALL on
ADP

10 June

Sooty Tern Returns

863 77549 · 843-65855
 67473 · 65443
 ✓ 60336 · 67837
 61299 · 65448
 77427 · 69273
 62847 · 67547
 64419 · 68747
 68206 (a) (a)
 67917 ·

893-11945 · 753-24158
 893-11702 · 20853
 06333 · 24727
 08396 · (3)
 02769 ·
 12895 ·
 04235 ·
 03450 ·
 10676 ·
 04588 ·
 01620 (a)

ALL on ADP

10 June

Sooty Tern Returns

903-85168 · 793-82257
 21914 ·
 (16) 88436 ·
 73489 ·
 40793 ·
 76939 ·
 24790 ·
 88305 ·
 48412 · 943-98845
 21693 ·
 81398 ·
~~81398~~
 24919 ·
 33514 ·
 43959 ·
 75151 ·
 57729 ·
 64995 ·
 75025 ·

✓ ADP

Sooty Tern
Returns

863 - 68202 ✓

63086 ✓

77500 ✓

75570 ✓

68841 ✓

64253 ✓

67876 ✓

71658 ✓

903 - 56926 ✓

60579 ✓

20211 ✓

47339 ✓

55666 ✓

29883 ✓

80045 ✓

55583 ✓

49023 ✓

43608 ✓

22802 ✓

89606 ✓

43116 ✓

70876 ✓

53150 ✓

30975 ✓

55833 ✓

53153 ✓

85412 ✓

39120 ✓

(38)

✓ ADP

903 - 41097 ✓

39594 ✓

81272 ✓

51886 ✓

69451 ✓

29849 ✓

69393 ✓

43873 ✓

58353 ✓

22388 ✓

88737 ✓

20765 ✓

86883 ✓

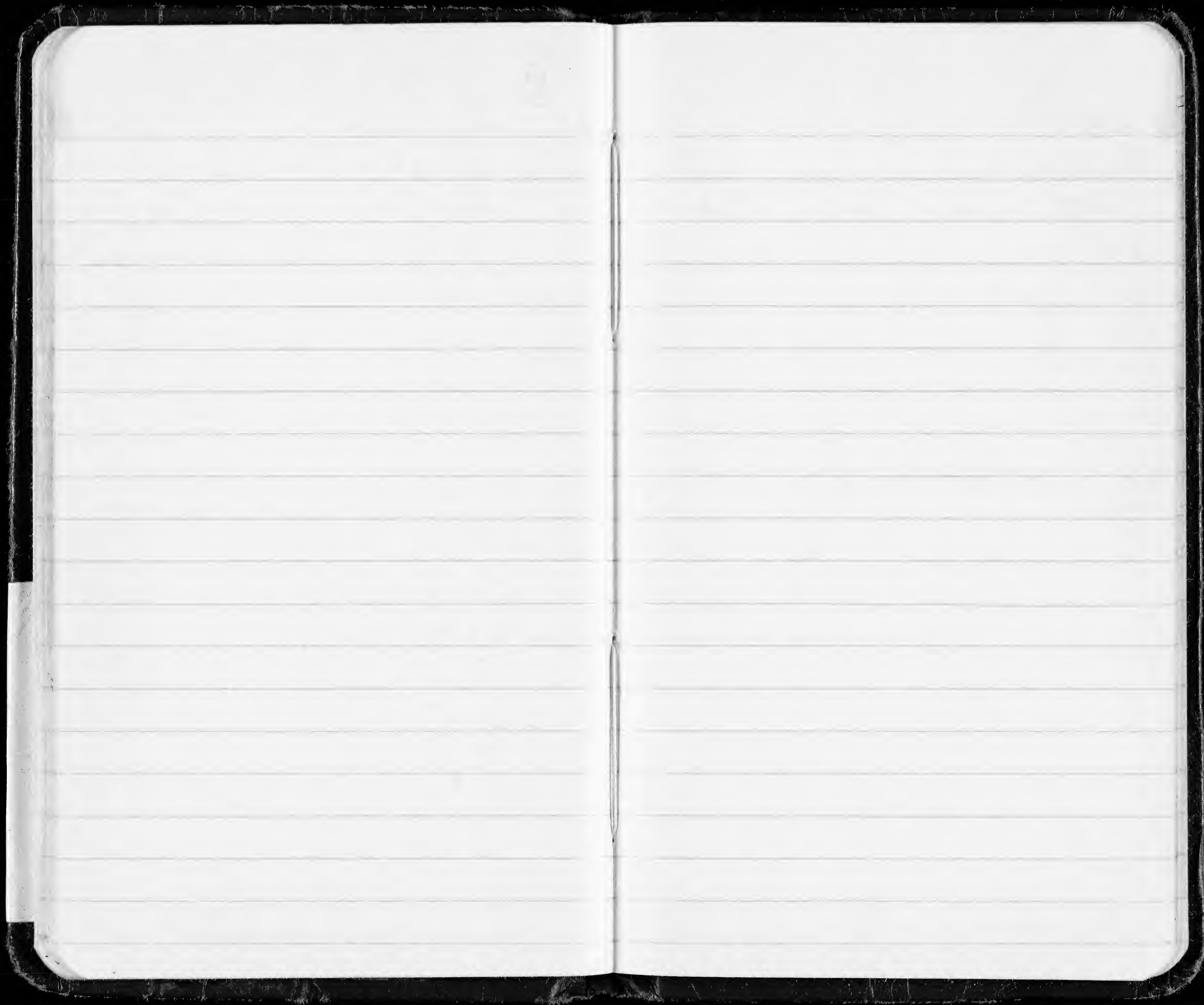
89628 ✓

25302 ✓

59962 ✓

68717 ✓

65127 ✓



~~1110~~

Bulwers

~~150~~ 300 - 300 - 500

100

Depth	Materials	Thin	Frags	Facing Bone
6"	Sage leaves & sticks	Thin	Frags	N
6"	✓	✓	✓	N
6"	✓	✓		NW ✓
6"	✓	✓		NW
6"	✓			N
1"	✓		✓	N
6"	✓			S
1"	✓			N
1"	✓			W
6"	✓			W
1"	✓	✓		

Return

10 June

Wedgetail

635

17768

Plot	#Adult	SubA	57 Yd
1	3	1	25

Erug 652 Erigon 20 Trib 15

Plot	Adult	SA	sqYd	Dead B	
1	3	1	2.5	0	
2	1	0	2.5	4	
3	—	—	—	—	Open Sandy

Eveg	Eragron	Tri b	Bee	Coverage
65	20	15		40%
85	15	—	—	50
—	—	—	—	

Haw NT

OE

SD -1-1-2-2

MD -2-2-3-4-2

LD -4-4-3-6-2

Return 11 June
Sooty Tern All on ADP

863-73526 ✓ 903-81653 (20)

72087 ✓ 21490

69365 ✓ 25937

(17) 73986 ✓ 39770

66593 ✓ 39736

69486 ✓ 31833

62592 ✓ 30877

62875 ✓ 31383

62161 ✓ 31570

79406 ✓ 87192

65487 ✓ 42138

73353 ✓ 75387

83152

81152

20790

58326

75917

77191

72392

42606

823-16655

20761

01106

19496

(A)

ALL on ADP

(19)

843-69555 ✓ 903

63110 ✓

67006 ✓

67834 ✓

65970 ✓

65043 ✓

893 0223 (15)

893-08762

893 05644

893-14291

01346

11331

10751

14352

14185

02320

07170

41983

05742

10922

00206

55876

55872

46582

20140

70846

51577

63561

20759

41107

74751

89076

71737

68646

75319

51304

793-82299 ✓

82410

ALL on ADP

(40)

903-68117	903-35833
83752	26440
48845	66756
58643	75630
68621	75856
33043	48910
87792	43064
34021	75642
83083	43462
81319	56127
45386	83528
32890	76262
36672	43662
42363	49137
37093	47522
71495	76188
30849	25431
78830	36847
82574	61091
88223	28761

ALL on ADP

(2)

(11)

893-83625	663-68570 ✓
05231	74143 ✓
10944	668858 ✓
13147	04303 ✓
09071	26796 ✓
00201	74618 ✓
00767	63427 ✓
12680	75425 ✓
07918	73474 ✓
11077	76658 ✓
12801	63287 ✓
00023	843-99861 ✓

SOOTY J
Allen AD [Cont]

903-60969

68957

33963

30739

63794

51950

39745

32782

86010

76754

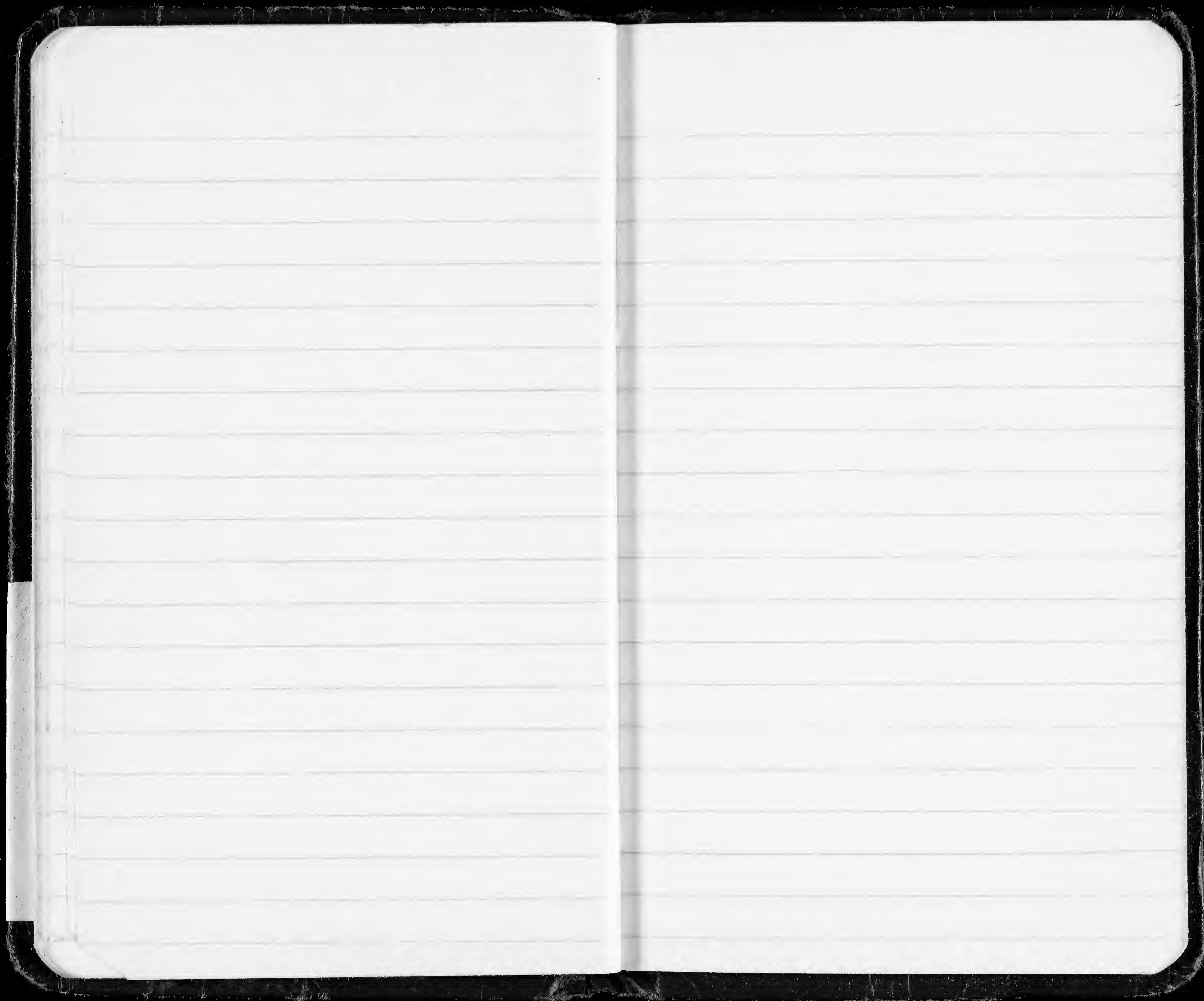
79996

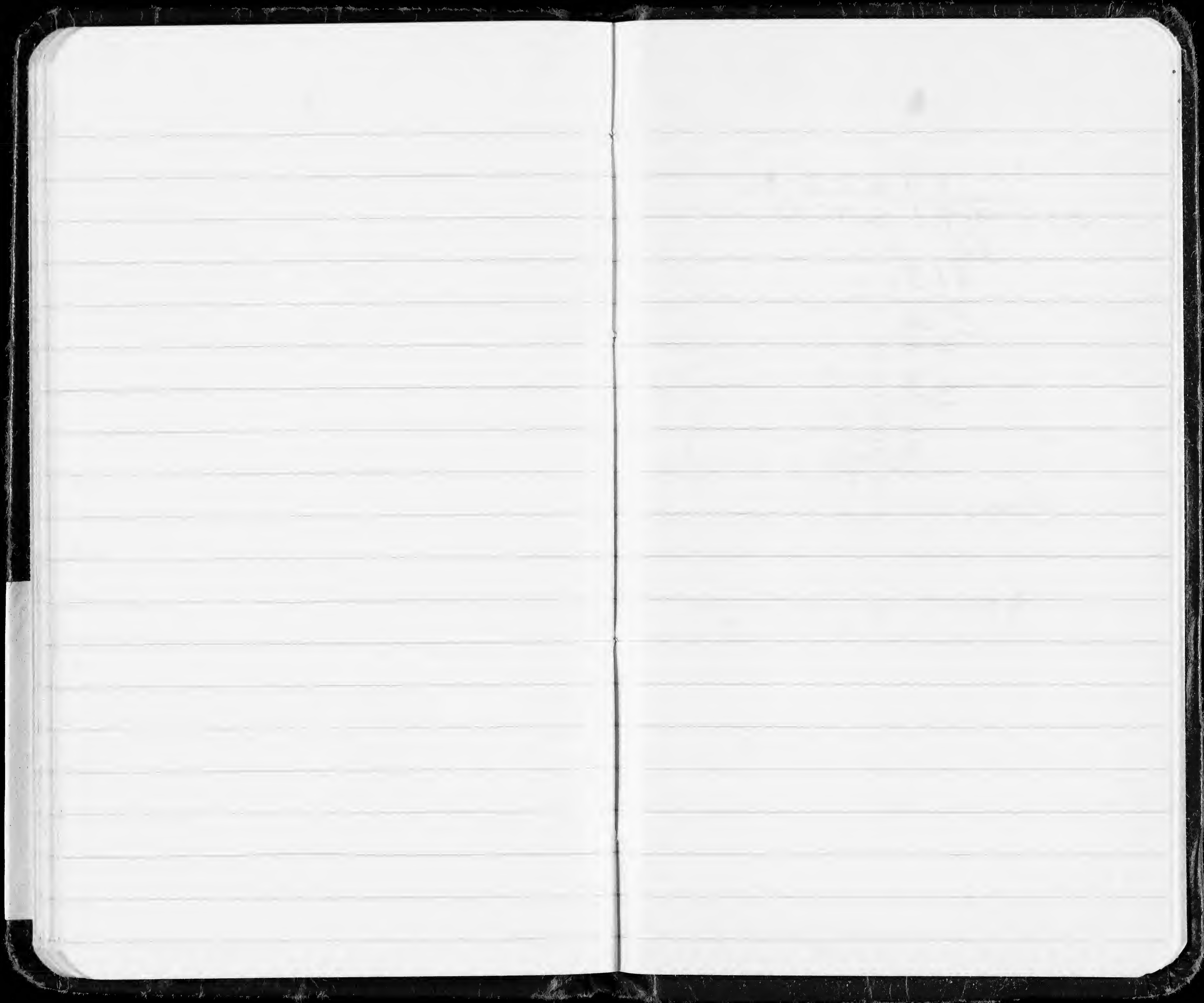
47764

87294

55082

31884





$$\begin{array}{r}
 106758 \\
 91 \overline{) 9715000} \\
 \underline{91} \\
 615 \\
 \underline{546} \\
 690 \\
 \underline{637} \\
 530 \\
 \underline{455} \\
 750
 \end{array}$$

347

$$\begin{array}{r}
 450 \\
 \underline{150} \\
 22508 \\
 \underline{450} \\
 67508 \\
 \underline{40000} \\
 107586 \text{ eqydas} \\
 9 \\
 \hline
 971,588 \text{ eq ft.}
 \end{array}$$

a

$$\begin{array}{r}
 106758 \\
 91 \overline{) 9715000} \\
 \underline{91} \\
 615 \\
 \underline{546} \\
 690 \\
 \underline{637} \\
 530 \\
 \underline{455} \\
 750
 \end{array}$$

$$\begin{array}{r}
 450 \\
 \underline{150} \\
 22500 \\
 \underline{450} \\
 67500 \\
 \underline{40000} \\
 107500 \text{ equals} \\
 9 \\
 \hline
 971,500 \text{ ft.}
 \end{array}$$

a

⑤ 757-29001 to
16

757-30201-30216
used on RFB (died)
Lisianski -
rest of string not used.

7530-222-007
FEDERAL SUPPLY SE